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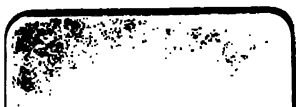
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THE
BIRTH, MARRIAGES AND DEATHS

IN AMERICA

FOR THE YEAR 1888

NO. 1000

SECRETARY OF STATE

DEPARTMENT OF STATE

OF 1888

STATE OF MICHIGAN



BY AUTHORITY.

Printed by Smith & Co., New York.

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CONTENTS.

BIRTHS, MARRIAGES AND DEATHS.

	PAGE.
In Michigan for 1888, Compared with other Years.....	1
Natural Increase of Population.....	1
Exhibit of B., M., and D., as returned and as Corrected.....	2
Population, Actual for 1890-4, Estimated for 1881-2-3-5-6-7-8.....	2
Various relations of B., M., and D., to Population, Etc.....	2-3
Rates of Births, Marriages and Deaths in various States and Countries.....	4
Number of B., M., and D., for Twenty-one Years, Excess of B. over D.....	5
The same for 1888, by Divisions of the Year, as Returned and Corrected.....	6
Births and Deaths, with excess of B. over D., 1888-9.....	7
B., M., and D., Population, Excess B. over D., by Counties and Sex.....	8-11

BIRTHS.

As returned and as Corrected for Omissions, 1879-1888.....	12
Population Represented by and Relation to.....	13
By Quarters, 1885-1888, and Ten-Year Average, as returned and Corrected.....	14
By Months in Order of Number, 1886-8, and Ten-Year Average.....	15
The same when Corrected for Omissions.....	16
By Sex and by Months for 1888, for State and Counties.....	17-24
Per Thousand of Inhabitants by Color.....	25
Table by Color and Sex as Related to Population.....	26
The same with Proportion of Sexes, for State and Counties.....	27-34
Nativity of Parents, 1888, with Table.....	35
Nativity of Parents, 1886-8, and Ten-Year Average, 1878-1887.....	36
Nativity of Parents, 1888, by Counties, and Births by Sex.....	37-44
Twins, Table of Births of, 1888, by Months.....	45
Nativity of Parents of Twins.....	46
Nativity and Color of Mothers, Proportion of Twins, 1886-1888, and Ten Years.....	47
Triplets, Certain Facts Concerning, 1888.....	48
Plural Births, Ratio of and Nativity of Parents, 1885-1888.....	48-49
Still-births.....	49
Still-births, Tables of Relations, Nativity and Color.....	50
Still-births, Parent Nativity and Proportion of each.....	51
The same by Sex and by Months.....	52
Proportion of Males to Females, all Births, 1887-8, 1878-1887.....	53
Illegitimate Births, Relation, Mothers of, Color, Nativity, etc.....	54
Illegimates, Various Tables, with Comparisons.....	55-59
Twins, Illegimates and Still-births, State and Counties.....	58-59
Townships which Reported "No Births".....	60
Townships from which no Returns were Received.....	61

DEPARTMENT OF STATE, }
OFFICE OF THE SECRETARY, }
June 21, 1889.

HON. CYRUS G. LUCE, *Governor of Michigan*:

SIR—In compliance with the requirements of the laws of this State, I have the honor to submit herewith the Twenty-second Annual Report relating to Births, Marriages and Deaths, returned for the year ending December 31, 1888.

The subjects presented for consideration in the present volume are as usual those concerning the natural increase of our population, the number of marriages and the mortality. An effort has been made to collect and classify, in the most perfect manner possible all the evidence relating to these subjects.

An examination of Exhibit A, on page 2, shows that 17,233 marriages, 48,952 births, and 21,764 deaths were returned for the year 1888. The same Exhibit also shows an excess of 27,188 births over deaths during the year. This number represents, according to the returns, the natural increase in population for the year.

In order to study the influence upon the health of the inhabitants exerted by climate, water, drainage, etc., the State is divided into divisions, the characteristics of which are more or less distinct. Each of these divisions is made up of a number of counties, the list of which, arranged in alphabetical order, will be found in Table 75.

In this as in preceding reports, much attention has been given to the causes of deaths, this being considered the most important part of the work. Beginning on page 143, the causes specified for the deaths in Michigan in 1888 are studied by classes, by months in the year, by part of the body affected, and the localities in which the death occurred. It is gratifying in this connection to note the fact that the reports of the causes of death are more accurate and satisfactory than in previous years.

The most important causes of mortality, in 1888, were consumption, pneumonia, diphtheria, heart disease, and cholera infantum. There was no destructive epidemic during the year, and while the number of deaths were increased, as compared with those of 1887, it was no more than would naturally result from the increase in the population. Zymotic diseases, on the prevalence of which the health of a season usually depends, have fallen

off over two per cent from the preceding year. Consumption is always a leading cause of mortality and usually has more victims than any other two diseases. Pneumonia is also a prominent cause of death, but the miasmatic diseases vary more or less from year to year according as one or the other is epidemic.

There was an unusual mortality among children and infants, in 1888, as may be seen by examining the figures in Table 49. Always very great, it is greater this year than for any year since 1884. Over 38 per cent of all deaths occurred among children under five years of age. This is accounted for by the increased number of deaths from cholera infantum and measles.

The importance of thoroughness and accuracy in our system of registration, as has been alluded to in previous reports, can hardly be overestimated. Unless the work, including the original returns of the supervisors as well as the tables and abstracts compiled at this office, be well done, it will be of little value. In order to secure this result, much care and labor are bestowed upon the returns. Whenever any error is discovered in the returns it is carefully noted and correction secured, if possible, by correspondence with the officials.

Respectfully submitted,

GILBERT R. OSMUN.

Secretary of State.

BIRTHS, MARRIAGES AND DEATHS

IN MICHIGAN

DURING THE YEAR 1888.

This report upon the subject of births, marriages and deaths, like its predecessors, is based upon the official returns received in the Department of State from the county clerks.

In this State the enumeration of births and deaths is made and reported to the county clerks by the supervisors and assessors of townships and cities, except in Detroit, where the enumeration is made by persons appointed by the common council. The facts concerning marriages are reported to the county clerks by the ministers of the gospel and justices of the peace, who are authorized to solemnize marriages in Michigan.

The important facts considered in these pages are the rates of births, marriages, and deaths to the population, the age, sex, nativity, seasons of the year, etc., relating to each of the above divisions. Special prominence is given to the diseases or causes of death which will be found in the latter part of the work.

Exhibit A, which gives a comprehensive statement of registration for the years 1885, 1886, 1887, 1888, and the average for ten years, 1878-1887, shows that there were returned for the year 1888, 48,952 births, 17,233 marriages, and 21,764 deaths, making an aggregate registration of 87,949, or 5,191 more than were recorded for the year 1887, and 12,036 more than for the year 1886. As compared with the year 1887, there were reported 2,726 more births, 61 more marriages, and 2,282 more deaths. The natural increase of population, or excess of births over deaths, is 27,188, a number more by 444 than the natural increase in 1887. It is the largest excess recorded in any one year in Michigan. As compared with the average for the ten years 1878-1887, the year 1888 shows a very large increase in each division.

VITAL STATISTICS OF MICHIGAN, 1888.

EXHIBIT A.—*Births, Marriages and Deaths returned as having occurred in Michigan during each of the Years 1885 to 1888, and the Average for Ten Years, 1878-1887, as returned and as corrected for omissions in the enumeration.*

		1885.	1886.	1887.	1888.	Average 10 Years, 1878-1887.
As returned.	Marriages a.....	15,885	16,658	17,172	17,233	15,775
	Births.....	42,119	41,095	46,226	48,952	38,704
	Deaths.....	16,646	18,187	19,482	21,764	16,822
	Excess of births over deaths.....	25,473	22,908	26,744	27,188	21,882
As cor- rected for omissions.	Births.....	58,026	60,484	58,498	60,120	54,091
	Deaths.....	22,704	25,210	27,251	26,043	24,484
	Excess of births over deaths.....	35,322	35,274	31,242	34,077	29,657

^a Corrected for additional returns up to April 13, 1889.

POPULATION.

As there has been no census of the State taken since the year 1884, it is desirable to make an estimate of the population for the years since that time.

In order to secure the most accurate results, the method usually adopted by statisticians has been employed, which is based upon the supposition that the annual rate of increase prevailing from 1880 to 1884 was also maintained for the year 1888.

This estimate, of course, is only approximately correct, as there may be a great difference in the rate of immigration and emigration from one year to another.

Based upon this annual rate of increase, the population for the State for the years 1880-1888, that for the years 1880 and 1884 being the actual figures as per census, would be as follows :

Years.	Population.
1880.....	1,636,937
1881.....	1,688,599
1882.....	1,741,891
1883.....	1,796,865
1884.....	1,853,658
1885.....	1,912,159
1886.....	1,972,507
1887.....	2,034,759
1888.....	2,098,976

The relations which the births, marriages and deaths sustain to each other, as well as to the inhabitants of the State, may be seen in Exhibit B. The natural daily increase of population in 1888 was 74, one more than in the previous year. By the returns and the population of 1884, one child was born, in 1888, to every 38 persons, one marriage was solemnized to every 107 persons, and one death occurred to every 85 persons.

The birth-rate, marriage-rate, and death-rate according to the population of 1884, represented by the returns in 1888, were as follows :

BIRTHS, MARRIAGES, AND DEATHS.

3

Birth-rate	26.50 to 1,000
Marriage-rate	9.30 to 1,000
Persons married	18.60 to 1,000
Death-rate	11.79 to 1,000

EXHIBIT B.—Statements concerning Births, Marriages and Deaths in Michigan during the Years 1884–1888 inclusive.

	* 1884.	* 1885.	* 1886.	* 1887.	* 1888.
Inhabitants represented by returns of marriages to one marriage ^b	115.93	116.69	111.28	107.95	107.49
In population represented by marriages, males to one marriage.....	60.94	61.34	58.50	56.74	56.51
In population represented by marriages, females to one marriage.....	54.98	55.34	52.77	51.19	50.98
Inhabitants represented by births to each child returned.....	45.78	43.95	44.98	39.94	37.74
Inhabitants, males to each male child returned.....	46.49	44.86	45.54	40.37	38.02
Inhabitants, females to each female child returned.....	45.20	43.11	44.51	39.58	37.45
Inhabitants represented by deaths to one death.....	102.40	110.90	101.61	94.79	84.81
Inhabitants, males to one death of male.....	101.32	107.50	99.87	91.86	82.78
Inhabitants, females to one death of female.....	104.61	115.68	104.34	98.70	87.37
Deaths, males to 100 females.....	114.36	119.24	115.75	119.00	117.00
Births, males to 100 females.....	107.70	106.50	108.28	109.00	109.00
Total population of State, males to 100 females.....	110.85	110.85	110.85	110.85	111.00
Births to one death.....	2.24	2.53	2.26	2.37	2.25
Births, males to one death of male.....	2.18	2.40	2.19	2.27	2.18
Births, females to one death of female.....	2.32	2.69	2.34	2.49	2.33
Children born of which the sex was unknown or not stated.....	86.00	63.00	63.00	70.00	25.00
Decedents of which the sex was unknown or not stated.....	82.00	52.00	60.00	42.00	18.00
Natural daily increase of population, as per births and deaths returned.....	61.00	69.00	63.00	73.00	74.00
Natural daily increase of population where returns of births and deaths are corrected for omissions in the enumeration.....	82.00	97.00	97.00	86.00	94.00

^a In computing statements for this column the population of 1884 was used.

^b Marriages corrected for additional returns up to April 13, 1889.

VITAL STATISTICS OF MICHIGAN, 1888.

The following statistics, taken from the registration report of Massachusetts for 1888, show the rates of births, marriages and deaths in various states and countries.

Rates of Births, Marriages and Deaths in various States and Countries for the Years 1886 and 1887.

States and Countries.	1886.				1887.			
	Birth-rate.	Death-rate.	Excess of Birth-rate over Death-rate.	Marriage-rate.	Birth-rate.	Death-rate.	Excess of Birth-rate over Death-rate.	Marriage-rate.
Massachusetts	25.7	18.8	6.8	18.2	26.4 ^a 26.8	20.3 ^a 20.6	6.2 ^a 6.3	19.4 ^a 19.3
New Hampshire.....	19.2	18.5	0.7	19.1	19.9	18.7	1.2	20.1
Rhode Island.....	24.5	18.8	5.7	17.7	24.2	19.9	4.3	18.0
England and Wales.....	32.4	19.3	13.1	14.1	31.4	18.8	12.6	14.2
Scotland.....	32.4	18.6	13.8	12.4	31.2	18.7	12.5	12.5
Ireland.....	23.3	17.9	5.4	8.4	23.2	18.3	4.9	8.7
Denmark.....	32.6	18.2	14.4	14.2	32.0	18.3	13.7	14.0
Sweden.....	29.8	16.6	13.2	12.8				
Austria.....	37.7	29.2	8.5	15.5	38.2	28.9	9.3	15.6
Prussia.....	37.7	26.0	11.7	16.2	37.8	23.9	13.9	16.0
Netherlands.....	34.6	21.8	12.8	13.9	33.7	19.7	14.0	14.0
France.....	23.9	22.5	1.4	14.8	23.5	22.0	1.5	14.6
Hungary.....	45.5	32.2	13.3	19.3				
Switzerland.....	27.5	20.4	7.1	13.7				
Belgium.....	29.6	21.1	8.7	13.4	29.4	19.3	10.1	14.2
Italy.....	36.5	28.3	8.2	15.6	38.3	27.7	10.6	15.5
German Empire.....	37.1	26.2	10.9	15.8	36.9	24.2	12.7	15.6
Norway.....	30.9	16.1	14.8	13.1				

^a 1888.

BIRTHS, MARRIAGES, AND DEATHS.

5

As seen from Exhibit C, there were returned to the State Department during the period of twenty-one years, from 1868 to 1888 inclusive, 728,250 births, 265,676 marriages, and 303,558 deaths, making a grand total of 1,297,484. The average for these years will be found on the lower line of the exhibit. There has been a noticeable increase in the number of marriages returned for the years 1887 and 1888. The returns for 1868 embrace only a fractional part of the year, namely, from April 5 to December 31.

EXHIBIT C.—*The Number of Births, Marriages, Deaths and Excess of Births over Deaths, as returned for each of the Years 1868–1888.*

Years.	Births.	Marriages.	Deaths.	Excess of Births over Deaths.
1868.....	19,171	5,485	6,326	12,845
1869.....	27,093	8,459	9,145	17,948
1870.....	26,663	9,160	10,766	15,897
1871.....	25,992	10,181	9,728	16,264
1872.....	27,993	9,882	13,371	14,622
1873.....	34,606	10,574	14,258	20,350
1874.....	31,151	11,041	12,500	18,651
1875.....	31,958	11,055	11,990	19,968
1876.....	34,235	10,858	12,576	21,659
1877.....	33,395	11,009	12,919	20,476
1878.....	35,162	12,221	12,766	22,396
1879.....	34,122	13,225	14,407	19,715
1880.....	35,323	14,149	16,102	19,221
1881.....	34,749	14,847	19,238	15,511
1882.....	37,026	16,178	16,425	20,601
1883.....	40,809	16,420	16,906	23,903
1884.....	40,408	15,002	18,056	22,352
1885.....	42,119	15,016	16,646	25,473
1886.....	41,095	16,631	18,167	22,928
1887.....	46,226	17,050	19,482	26,744
1888.....	48,952	17,233	21,764	27,188
Total	728,250	265,676	303,558	424,692
Average	34,679	12,651	14,455	20,224

VITAL STATISTICS OF MICHIGAN, 1888.

The average number of births, marriages and deaths for certain specified periods of time within the year 1888 will be found in Exhibit D. There were on an average, according to the returns, 131 births, 47 marriages, and 60 deaths during each day of the year 1888. The daily increase of population, as shown by the excess of births over deaths, was 74 per day. When the returns of births and deaths are corrected for omissions, as in the lower part of the exhibit, the numbers are considerably increased.

EXHIBIT D.—*The number of Marriages, Births, Deaths, and Excess of Births over Deaths in Michigan during the Year 1888, the Average Number and Excess for specified periods of time within the year as returned, and the same for Births and Deaths as corrected for omissions in the enumeration.*

Periods of Time—1888.		Marriages, 1888.	Births, 1888.	Deaths, 1888.	Excess of Births over Deaths.
As Returned.	Year 1888 a.....	17,233	48,952	21,764	27,188
	Quarter.....	4,308	12,238	5,441	6,797
	Month.....	1,436	4,079	1,814	2,265
	Week.....	331	941	419	522
	Day.....	47	134	60	74
Births and Deaths as Corrected.	Year 1888 b.....		60,120	26,043	34,077
	Quarter.....		15,080	6,511	8,519
	Month.....		5,010	2,170	2,840
	Week.....		1,156		55
	Day.....		165	71	94

a Unknown month included.

b Corrected as if enumerated in months of occurrence.

The design of Exhibit E is to show the natural increase of population, or excess of births over deaths, by months, for the years 1883–1888, and in the last line the monthly averages of excess for the 10 years, 1879–1888. It will be observed that the average excess for the ten years is less by 4,831 than the excess for the year 1888. An examination of the exhibit will show that the largest excess of births for the year 1888 was in the month of June, while the average for ten years the largest excess of births was in the month of May.

BIRTHS, MARRIAGES, AND DEATHS.

7

EXHIBIT E.—By Months, the Births, Deaths and Excess of Births over Deaths, according to the returns, in Michigan, during each of the Years 1883-1888, inclusive.

	Total.*	Months.											
		Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1883													
Births.....	40,767	2,654	2,784	3,312	3,455	3,667	3,333	3,576	3,765	3,604	3,664	3,358	3,555
Deaths.....	16,857	1,066	1,134	1,374	1,500	1,480	1,284	1,489	1,651	1,613	1,401	1,397	1,598
Excess of Births.....	23,910	1,588	1,650	1,938	1,955	2,237	2,079	2,137	2,114	2,081	2,263	1,961	1,957
1884													
Births.....	40,359	2,749	2,578	3,498	3,430	3,490	3,407	3,483	3,678	3,559	3,445	3,215	3,544
Deaths.....	18,000	1,067	1,131	1,421	1,383	1,456	1,266	1,530	1,917	1,877	1,753	1,536	1,615
Excess of Births.....	22,359	1,681	1,667	2,077	2,046	2,024	2,141	1,962	1,756	1,683	1,693	1,689	1,929
1885													
Births.....	42,083	2,707	2,967	3,533	3,618	3,730	3,346	3,567	3,924	3,905	3,634	3,383	3,699
Deaths.....	16,590	1,131	1,267	1,421	1,474	1,296	1,135	1,363	1,496	1,559	1,492	1,362	1,561
Excess of Births.....	25,493	1,576	1,720	2,112	2,144	2,444	2,211	2,204	2,438	2,436	2,132	2,001	2,125
1886													
Births.....	41,044	2,617	2,858	3,456	3,640	3,496	3,353	3,598	3,781	3,707	3,540	3,270	3,727
Deaths.....	18,127	1,065	1,098	1,462	1,366	1,376	1,231	1,461	1,887	1,889	1,761	1,615	1,841
Excess of Births.....	22,917	1,552	1,765	1,994	2,244	2,122	2,071	2,137	1,894	1,818	1,779	1,655	1,886
1887													
Births.....	46,166	3,132	3,150	3,967	3,868	3,960	3,666	4,011	4,266	4,331	3,944	3,765	4,053
Deaths.....	19,416	1,249	1,274	1,535	1,599	1,472	1,405	1,915	2,055	1,916	1,699	1,554	1,743
Excess of Births.....	26,750	1,883	1,876	2,452	2,267	2,488	2,261	2,096	2,211	2,415	2,245	2,211	2,315
1888													
Births.....	48,907	3,531	3,516	4,099	3,953	4,214	4,133	4,223	4,514	4,415	4,305	3,811	4,198
Deaths.....	21,698	1,416	1,585	1,965	1,909	1,858	1,627	1,799	2,169	1,978	1,843	1,642	2,012
Excess of Births.....	27,209	2,115	1,931	2,234	2,044	2,356	2,506	2,424	2,345	2,437	2,462	2,169	2,181
Monthly averages of excess for 1879 to 1888, inclusive.....	22,378	1,623	1,616	1,930	1,868	2,013	1,938	1,943	1,906	1,902	1,904	1,790	1,910

* Unknown month excluded.

EXHIBIT F.—Showing, by Sex, the Population in 1884, the Number of Marriages, Births and Deaths, and the Excess of Births over Deaths, in Michigan, during the Year 1888.

State and Counties.	Population, 1884.				Marriages, 1888.	Births, 1888.				Deaths, 1888.				Excess of Births over Deaths.			
	Total.	Sex.				Total.	Sex.			Total.	Sex.			Total.	Sex.		
		Males.	Fe- males.	Un- known.			Males.	Fe- males.	Un- known.		Males.	Fe- males.	Un- known.		Males.	Fe- males.	Un- known.
State	1,883,638	974,424	979,023	206	49,952	25,526	23,401	25	21,764	11,722	10,024	13,804	13,377	7			
Alcona	4,028	2,428	1,600	—	62	37	25	—	28	17	11	20	14	—			
Alger	—	—	—	—	9	23	10	13	—	15	5	5	3	—			
Allegan	38,666	20,032	18,614	—	319	767	399	378	423	220	208	344	169	175			
Alpena	12,638	6,990	5,693	—	137	409	226	188	117	70	47	262	156	186			
Antrim	8,761	4,796	4,025	—	78	202	115	87	76	39	37	126	76	50			
Arenac	4,027	2,319	1,708	—	32	127	63	64	48	31	17	79	32	47			
Baraga	3,089	1,319	1,220	—	28	74	36	38	46	28	18	28	8	20			
Barry	24,102	12,507	11,595	—	206	862	192	170	177	92	85	186	100	85			
Bay	51,221	28,215	23,008	—	447	1,491	798	708	481	263	218	1,010	515	485			
Benzie	4,399	2,349	2,040	—	25	102	63	39	52	31	21	50	32	18			
Berrien	37,776	19,225	18,551	—	376	610	322	298	335	166	169	275	156	119			
Branch	27,661	14,042	13,619	—	242	351	176	175	255	128	127	98	48	48			
Calhoun	41,588	21,297	20,295	3	323	651	334	317	394	189	186	267	145	122			
Cass	21,202	10,896	10,316	—	172	388	190	148	172	92	80	166	96	68			
Charlevoix	9,275	5,060	4,245	—	88	143	72	71	48	20	28	95	52	43			
Cheboygan	9,946	5,308	4,443	—	98	317	159	158	103	49	54	214	90	104			
Chippewa	8,422	4,746	3,676	—	106	178	92	86	63	36	27	115	56	59			
Clare	5,549	3,251	2,298	—	68	153	66	85	79	33	46	74	35	39			

VITAL STATISTICS OF MICHIGAN, 1888.

BIRTHS, MARRIAGES, AND DEATHS.

9

Clinton	27,135	14,084	13,101	229	458	280	238	287	116	121	221	104	117	.....
Crawford	2,359	1,381	1,008	30	16	9	7	7	4	3	9	5	4	.....
Delta	9,992	5,876	4,116	149	378	200	178	165	101	64	218	99	114	.....
Eaton	31,803	16,210	15,592	266	468	225	242	1	298	186	172	65	106	1
Emmet	7,944	4,066	3,849	72	131	64	57	98	50	46	25	14	11	.....
Genesee	88,776	19,782	18,984	326	541	285	275	1	270	143	271	139	182	.....
Gladwin	1,589	899	640	18	53	30	23	14	4	10	39	26	13	.....
Gogebic	.....	.....	.....	121	251	146	105	188	107	61	88	39	44	.....
Grand Traverse	12,062	6,522	5,570	120	247	134	113	181	70	61	116	64	52	.....
Gratiot	25,049	13,304	11,845	238	473	240	231	2	168	86	305	154	189	2
Hillsdale	31,636	15,911	15,775	238	338	169	169	259	136	123	79	33	46	.....
Houghton	26,146	14,168	11,978	331	1,022	554	468	343	190	153	679	364	315	.....
Huron	24,521	12,934	11,585	169	671	345	326	202	91	111	469	254	215	.....
Ingham	34,889	17,917	17,022	334	491	245	246	408	212	196	88	33	50	.....
Ionia	32,559	17,957	15,502	278	440	221	219	226	108	118	214	113	101	.....
Iosco	10,402	6,090	4,542	123	300	151	149	141	89	53	159	62	87	.....
Iron	.....	.....	.....	36	97	43	54	23	15	8	74	28	46	.....
Isabella	16,011	8,597	7,414	146	432	224	206	130	91	89	252	133	119	.....
Jackson	45,232	23,385	21,847	337	579	306	271	396	200	196	133	108	75	.....
Kalamazoo	35,231	17,875	17,406	374	679	342	337	392	231	161	287	111	176	.....
Kalkaska	4,493	2,470	2,023	52	102	44	38	42	22	20	60	22	38	.....
Kent	84,600	43,467	41,133	1,048	2,079	1,033	996	1,004	532	472	1,075	531	524	.....
Keweenaw	4,667	2,551	2,116	14	118	73	45	50	34	16	68	39	29	.....
Lake	7,539	4,528	3,011	69	90	35	55	37	18	19	53	17	36	.....
Lapeer	30,057	15,568	14,439	247	481	261	217	245	117	124	236	144	83	-1
Leelanaw	7,123	3,842	3,236	58	232	114	118	104	54	50	128	60	68	.....

* The figures with the minus sign placed before them indicate the excess of deaths over births.

VITAL STATISTICS OF MICHIGAN, 1888.

EXHIBIT F.—CONTINUED.

Counties.	Population, 1884.				Marriages, 1888.	Births, 1888.				Deaths, 1888.				Excess of Births over Deaths.			
	Total.	Sex.				Total.	Sex.			Total.	Sex.			Total.	Sex.		
		Males.	Fe- males.	Un- known.			Males.	Fe- males.	Un- known.		Males.	Fe- males.	Un- known.		Males.	Fe- males.	Un- known.
Lenawee.....	49,584	24,916	24,668	.....	849	632	320	312	.....	450	238	210	2	132	82	102	-2
Livingston.....	21,568	11,254	10,314	.....	167	304	151	153	.....	151	84	67	.....	153	67	86	.....
Lapeer.....	.....	.....	.....	.....	26	19	10	9	.....	5	5	.....	.....	14	5	9	.....
Mackinac.....	5,171	2,943	2,223	.....	64	120	67	53	1	44	25	13	1	76	42	34	.....
Macomb.....	31,202	15,978	15,315	.....	251	637	332	335	.....	324	182	142	.....	363	170	193	.....
Manistee.....	19,375	10,379	8,998	.....	222	696	395	301	.....	230	142	88	.....	466	253	213	.....
Manitou.....	1,198	547	456	195	.....	10	5	5	.....	4	2	2	.....	6	3	3	.....
Marquette.....	31,397	17,530	13,817	.....	945	1,049	544	505	.....	469	269	200	.....	530	275	305	.....
Mason.....	13,321	7,232	5,989	.....	127	334	169	165	.....	115	59	56	.....	219	110	109	.....
Mecosta.....	20,597	11,283	9,314	.....	190	375	177	198	.....	153	94	59	.....	222	83	139	.....
Menominee.....	19,120	11,498	7,632	.....	243	641	437	404	.....	398	175	133	.....	533	262	271	.....
Midland.....	8,776	4,728	4,043	.....	76	260	151	109	.....	90	50	40	.....	170	101	69	.....
Missaukee.....	8,836	2,036	1,350	.....	38	86	49	37	.....	32	16	16	.....	54	33	21	.....
Monroe.....	32,353	17,136	16,167	.....	300	670	341	327	2	320	157	162	1	350	134	165	1
Montcalm.....	35,356	18,774	16,531	1	264	598	315	288	.....	232	113	119	.....	366	202	164	.....
Montmorency.....	845	494	351	.....	16	26	12	14	.....	7	5	2	.....	19	7	12	.....
Muskegon.....	37,554	20,522	17,029	3	427	1,189	617	531	1	461	257	204	.....	678	360	317	1
Newaygo.....	13,996	10,684	8,312	.....	168	329	161	168	.....	112	66	46	.....	217	95	122	.....
Oakland.....	41,100	20,821	20,279	.....	320	499	262	227	.....	363	207	175	.....	107	55	52	.....
Oceana.....	14,519	7,859	6,660	.....	135	232	141	111	.....	95	54	41	.....	137	87	100	.....
Ogemaw.....	3,637	2,041	1,596	.....	52	117	68	49	.....	32	16	16	.....	86	52	33	.....

BIRTHS, MARRIAGES, AND DEATHS.

11

	4,886	8,329	1,507	116	54	34	16	4	23	13	10	81	21	6	4
Ontonagon.....	14,001	7,583	6,468	128	341	183	158	---	130	64	56	221	119	102	---
Oscoda.....	1,374	798	576	18	8	4	4	---	4	2	2	4	2	2	---
Otego.....	8,906	2,223	1,683	44	64	31	30	---	19	11	8	45	28	22	---
Ottawa.....	96,225	18,970	17,255	229	919	444	475	---	841	180	161	578	284	314	---
Presque Isle.....	4,094	2,168	1,896	82	127	70	55	2	39	13	19	88	52	36	---
Roscommon.....	2,588	1,813	775	17	33	17	16	---	13	12	6	15	5	10	---
Saginaw.....	74,795	41,588	38,207	685	2,156	1,168	987	1	916	499	416	1,240	669	571	---
Sanilac.....	29,583	15,578	14,005	224	719	390	359	---	268	154	114	451	206	245	---
Schoolcraft.....	8,846	2,598	1,278	53	102	56	45	1	31	19	11	71	37	34	---
Shiawassee.....	28,078	14,781	13,347	276	369	203	166	---	182	94	88	187	109	78	---
St. Clair.....	46,783	24,058	22,723	445	1,060	537	493	---	493	260	222	568	297	271	---
St. Joseph.....	26,277	13,295	12,982	201	498	251	187	---	398	173	165	100	78	22	---
Tuscola.....	30,726	16,126	14,600	283	605	287	318	---	317	158	159	288	129	159	---
Van Buren.....	30,341	15,377	14,364	274	538	235	253	---	343	166	177	195	119	76	---
Washtenaw.....	41,694	21,087	20,627	312	547	290	257	---	411	205	206	136	85	51	---
Wayne.....	188,966	94,492	94,474	1,987	14,016	7,325	6,715	6	5,301	2,959	2,337	8,745	4,896	4,378	1
Wexford.....	10,518	5,782	4,786	116	256	137	119	---	89	46	43	167	91	76	---

* The figures with the minus sign placed before them indicate the excess of deaths over births.

BIRTHS, 1888.

The number of births returned in 1888 was 48,952, which was larger than that of any year since the beginning of registration in Michigan. The rate of births to population 26.50 to 1,000 was also larger than that of any other year. The average annual number returned for the ten years, 1878-1887, was 38,704, and the births in 1888 were more than this average by 10,248. This increase is again largely due to the increased number of births returned from Wayne county, and especially from the city of Detroit. In 1886, there were returned from Wayne county 6,388 births, in 1887 there were 10,857, while for the year 1888 there were 14,046, an increase of 3,189 over the number reported in 1887. By reference to Table 1, it will be seen that the increase from Wayne county alone is more than that for the entire State.

According to the system of correction for omissions in the enumeration of births, which has been adopted in previous reports, the number of births returned for 1888 should be increased by about 23 per cent in order to equal the number which probably occurred. In other words, about 80 per cent of the births in 1888 were returned, while for the average of ten years only about 73 per cent were returned.

Years.	Per cent of Births Returned.	Per cent of Births added as correction for Omissions.
1879	68.05	46.91
1880	69.73	43.42
1881	69.76	48.35
1882	74.81	34.57
1883	72.57	37.79
1884	73.24	36.54
1885	72.57	37.90
1886	67.92	47.24
1887	79.01	26.57
1888	81.41	22.84
Average for 10 years	72.86	37.70

The population of Michigan, according to the State census of 1884, was 1,853,658. When 6,424 has been subtracted, being the number of inhabitants from whom no returns of births were received, it gives 1,847,234 as the number of inhabitants in 1884

BIRTHS, PER QUARTER.

13

represented by the returns of births in 1888. As seen in the following tabular exhibit, the birth-rate was 2.65 for every hundred of the inhabitants, or 26.50 for every thousand. When the returns of births have been corrected for omissions in the enumeration because of late records, they are increased to 60,120 and the birth-rate to 3.25 to every hundred of the population, or 32.50 to every thousand:

Sex.	Inhabitants in 1884.—Represented by births in 1888.	Births as returned.	Births corrected for omissions in enumerating	Per Cent of Births to Inhabitants.	
				Births as Returned.	Births Corrected for Omissions.
Total	1,847,234	48,952	60,120	2.65	3.25

The following statistics, in regard to the birth-rates of different countries in Europe, are taken from the Registration Report of Massachusetts for the year 1888:

Eastern Europe (Russia)	49.4 to 1,000
Central Europe	37.6 " "
Southern Europe	34.0 " "
North-western Europe	32.0 " "

The countries having the highest and the lowest birth-rate are as follows:

	Highest.		Lowest.
1. Russia, 1867-78	49.4	1. Sweden, 1865-82	30.2
2. Croatia, 1874-80	45.3	2. Switzerland, 1870-83	30.2
3. Serbia, 1879-83	43.6	3. Greece, 1865-82	28.4
4. Hungary, 1865-83	43.0	4. Ireland, 1865-83	26.4
5. Wurttemberg, 1865-83	42.6	5. France, 1870-82	25.4
Average	44.8	Average	29.0

The average number of births per quarter, month, week, and day, during the year 1888, may be seen in the following tabular exhibit:

Periods of Time.	Births as Returned.	Corrected for Omissions.	Corrected with 37.70 Per Cent.
Per quarter	12,238	15,080	16,852
Per month	4,079	5,010	5,617
Per week	941	1,156	1,296
Per day	134	165	185

In Table 1 is given the relation of the birth-rate to the different quarters of the year, the data of 1888 being compared with those of 1885, 1886, 1887, and the average for ten years, 1878-1887. As usual, the third quarter, ending with September, had the largest proportion of births, and the last six months of the year returned more births than the first six months. This is true, not only for each year of the table, but also for the ten-year average, and it is interesting to note with what uniformity it occurs year after year. In Massachusetts the order is the same as in this State, while in England it is the reverse, there being more births recorded in the first six months of the year than the last. In the lower part of the table the returns of births are corrected for omissions, and the third quarter still shows the largest proportion of births.

TABLE I.—*Births by Quarters of the year for the years 1885-1888, and the Average for Ten Years, 1878-1887.*

Totals and Months with which Quarters End.		1885.		1886.		1887.		1888.		Average for 10 Years, 1878-1887.	
		Numb'r.	Per Cent of Total.	Numb'r.	Per Cent of Total.	Numb'r.	Per Cent of Total.	Numb'r.	Per Cent of Total.	Numb'r.	Per Cent of Total.
Totals		42,119	100.00	41,095	100.00	46,228	100.00	48,952	100.00	38,704	100.00
As Returned.	March	9,227	21.90	8,981	21.73	10,269	22.21	11,146	22.77	8,462	21.86
	June	10,694	25.39	10,490	25.53	11,522	24.98	12,900	25.12	9,589	24.77
	September	11,486	27.27	11,066	26.98	12,808	27.27	13,152	26.87	10,487	27.10
	December	10,676	25.35	10,587	25.84	11,767	25.46	12,909	25.15	10,125	26.16
	Unknown	36	.09	51	.12	60	.13	45	.09	41	.11
Average ^a		10,580	25.00	10,274	25.00	11,557	25.00	12,298	25.00	9,676	25.00
Totals		58,026	100.00	60,484	100.00	58,498	100.00	60,120	100.00	54,091	100.00
As Corrected for Omissions.	March	14,278	24.61	15,050	24.88	14,222	24.31	14,824	24.66	13,361	24.70
	June	15,417	26.57	16,288	26.93	15,096	25.81	15,558	25.87	14,060	25.99
	September	15,267	26.31	15,664	25.90	15,528	26.55	15,759	26.21	14,142	26.14
	December	18,028	22.45	18,481	22.21	18,587	28.23	18,989	28.19	12,487	28.09
	Unknown	36	.06	51	.08	60	.10	45	.07	41	.06
Average ^a		14,507	25.00	15,121	25.00	14,628	25.00	15,080	25.00	13,523	25.00

^a The number in unknown quarter of year included.

As shown by Table 2, the largest number of births in a single month of 1888 occurred in August, and the smallest in February, the difference being 998. Except for the year 1886, the months of August and September have returned the largest proportion of births for each year of Table 2, and also for the average of ten years. The least number of births are returned for the months of January and February for each year and the average. This would indicate that fewer children are born during these two months, but, as has been explained in previous reports, there is a better registration of the returns for the later than for the earlier months of the year.

TABLE 2.—*Births during the years 1886-1888, according to the Returns, the Average for Ten Years, 1878-1887, showing number and Percentage, by months in order of greatest first.*

Order.	1886.			1887.			1888.			Average for 10 Years, 1878-1887.		
	Months.	Numb'r.	Per Cent of Total.	Months.	Numb'r.	Per Cent of Total.	Months.	Numb'r.	Per Cent of Total.	Months.	Numb'r.	Per Cent of Total.
	Total..	41,095	100.00	Total....	46,228	100.00	Total....	48,952	100.00	Total..	38,704	100.00
1	Aug...	3,781	9.20	Sept....	4,381	9.37	Aug....	4,514	9.22	Aug...	3,602	9.31
2	Dec...	3,727	9.07	Aug....	4,266	9.23	Sept....	4,415	9.02	Sept..	3,562	9.20
3	Sept..	3,707	9.02	Dec....	4,058	8.78	Oct....	4,305	8.79	Dec....	3,516	9.06
4	Apr....	3,640	8.86	July....	4,011	8.68	July....	4,223	8.63	Oct..	3,415	8.82
5	July...	3,598	8.76	Mar....	3,987	8.62	May....	4,214	8.61	July...	3,323	8.59
6	Oct....	3,540	8.61	May....	3,960	8.57	Dec....	4,193	8.57	May..	3,278	8.47
7	May...	3,498	8.51	Oct....	3,944	8.53	June....	4,133	8.44	Apr....	3,257	8.36
8	Mar...	3,456	8.41	Apr....	3,896	8.43	Mar....	4,099	8.37	Mar...	3,207	8.29
9	June..	3,352	8.16	Nov....	3,765	8.14	Apr....	3,953	8.08	Nov...	3,194	8.25
10	Nov...	3,270	7.96	June...	3,666	7.93	Nov....	3,811	7.79	June..	3,074	7.94
11	Feb....	2,858	6.95	Feb....	3,150	6.81	Jan....	3,581	7.21	Feb....	2,683	6.93
12	Jan....	2,617	6.77	Jan....	3,132	6.78	Feb....	3,516	7.18	Jan....	2,572	6.65
	Unk..	51	.12	Unk....	60	.13	Unk....	45	.09	Unk..	41	.11
	Av. a..	3,425	8.33	Av. a....	3,852	8.33	Av. a....	4,079	8.33	Av. a..	3,225	8.33

a Including births in unknown months.

In Table 3 may be seen the order of the months after the returns of births are corrected for the probable omissions in the enumeration. The order of the months is not the same as in Table 2, but August heads the list in 1888, although March stands at the head in the average. The month of November has the lowest proportion, not only for each year of the table, but also for the ten-year average.

TABLE 3.—Births during the years 1886-1888, and the Average for Ten Years, 1878-1887, as corrected for Omissions in the enumeration, exhibiting the number and Percentage, by Months, in order of greatest first.

Order.	1886.			1887.			1888.			Average for 10 Years, 1878-1887.		
	Months.	Numb'r.	Per Cent of Total.	Months.	Numb'r.	Per Cent of Total.	Months.	Numb'r.	Per Cent of Total.	Months.	Numb'r.	Per Cent of Total.
	Total ..	60,484	100.00	Total	58,498	100.00	Total	60,120	100.00	Total ..	54,091	100.00
1	Apr. . .	5,815	9.61	Mar.	5,428	9.28	Aug.	5,410	9.00	Mar. . .	4,946	9.14
2	Mar. . .	5,680	9.39	Aug.	5,257	8.99	Mar.	5,366	8.93	Apr. . .	4,870	9.00
3	May . .	5,427	8.97	Sept.	5,225	8.93	May . . .	5,330	8.87	Aug. . .	4,862	8.99
4	Aug. . .	5,344	8.84	Apr.	5,208	8.89	Sept. . .	5,194	8.64	May . .	4,802	8.88
5	July . .	5,251	8.68	May . . .	5,186	8.87	July . . .	5,155	8.57	Sept. .	4,668	8.63
6	Sept. .	5,069	8.38	July . . .	5,046	8.63	June . .	5,136	8.54	July . .	4,612	8.53
7	June . .	5,046	8.34	June . .	4,707	8.05	Apr.	5,087	8.46	June .	4,888	8.11
8	Feb.	4,828	7.98	Oct.	4,657	7.96	Oct.	4,969	8.27	Oct. . .	4,846	8.03
9	Oct. . .	4,678	7.74	Dec.	4,582	7.83	Jan.	4,778	7.95	Feb. . .	4,246	7.85
10	Dec. . .	4,582	7.58	Jan.	4,425	7.57	Feb.	4,680	7.78	Dec. . .	4,202	7.77
11	Jan. . .	4,542	7.51	Feb.	4,369	7.47	Dec.	4,655	7.74	Jan. . .	4,169	7.71
12	Nov. . .	4,171	6.90	Nov.	4,348	7.43	Nov.	4,315	7.18	Nov. . .	3,989	7.28
	Unk. . .	51	.08	Unk. . .	60	.10	Unk. . .	45	.07	Unk. . .	41	.08
	Av. a. .	5,040	8.33	Av. a. .	4,874	8.33	Av. a. .	5,010	8.33	Av. a. .	4,508	8.33

a Including births in unknown month.

PROPORTION OF THE SEXES.

In Table 4 may be found the number of births returned from each county of the State during the year 1888, the number in each month of the year, and the number of each sex respectively. According to the statistics here presented, the number of male children born in Michigan during the year 1888, was 25,526, and the number of female children 23,401. In every year the births of males in this State have exceeded the births of females, the ratio of males to females in 1888 being 109 males to every 100 females. For a period of twenty years from 1868 to 1887 the average excess of male births was also 109 males to 100 females.

From an examination of Table 4, it will be seen that a large proportion of the counties have an excess of male births, 58 counties, in 1888, showing an excess of male births, 18 counties an excess of female births, and in six counties the number was equal. Comparing the relative proportion of the sexes in the larger counties of the State where the returns are more complete, it is seen that St. Joseph county has the largest excess of male births, while Mecosta county has the largest excess of female births.

The number of births in 1888, in which the sex was not reported, was 25, which is 45 less than were returned in 1887.

TABLE 4.—*Exhibiting, by Counties and by Sex, the Number of Births Returned for the Year, and in each month of the year ending December 31, 1888. (Still-births included.)*

State and Counties.	Sex.	Year, 1888.	Months, 1888.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
State	Totals	48,952	3581	3516	4099	3953	4214	4133	4223	4514	4415	4305	3811	4193	45
	Males	25,526	1829	1843	2120	2067	2174	2116	2190	2393	2268	2245	1959	2298	24
	Females	23,401	1699	1669	1979	1883	2038	2016	2030	2121	2145	2059	1850	1893	19
	Unknown	25	3	4		3	2	1	3		2	1	2	2	2
Alcona	Totals	62	1	6	3	3	5	7	11	5	6	5	5	5	
	Males	37	1	3	2	1	5	3	8	3	2	4	1	4	
	Females	25		3	1	2		4	3	2	4	1	4	1	
Alger	Totals	23	2	2	2	4			1	3	2	6	1		
	Males	10		2		2				1	2	2	1		
	Females	13	2		2	2			1	2		4			
Allegan	Totals	767	47	51	73	57	64	63	60	75	76	70	66	64	1
	Males	389	25	26	39	36	28	21	23	43	43	36	33	35	1
	Females	378	22	25	34	21	36	42	37	32	33	34	33	29	
Alpena	Totals	409	33	30	38	31	34	49	40	33	21	39	20	38	3
	Males	226	16	21	22	15	18	30	19	17	12	20	10	24	2
	Females	183	17	9	16	16	16	19	21	16	9	19	10	14	1
Antrim	Totals	202	11	17	19	21	20	11	16	21	16	22	16	12	
	Males	115	7	11	12	11	12	4	8	14	10	13	6	7	
	Females	87	4	6	7	10	8	7	8	7	6	9	10	5	
Arenac	Totals	127	8	5	9	16	12	9	14	11	15	9	8	11	
	Males	63	5	2	5	6	6	3	10	3	10	3	2	8	
	Females	64	3	3	4	10	6	6	4	8	5	6	6	3	
Baraga	Totals	74	7	4	6	5	11	5	8	5	4	6	7	6	
	Males	36	4	1	3	3	5	2	3	3	2	4	3	3	
	Females	38	3	3	3	2	6	3	5	2	2	2	4	3	
Barry	Totals	362	28	23	28	29	30	23	27	38	34	34	39	29	
	Males	192	14	10	14	26	16	10	13	23	15	18	20	13	
	Females	170	14	13	14	3	14	13	14	15	19	16	19	16	
Bay	Totals	1,491	116	116	131	112	126	120	135	136	122	129	125	122	1
	Males	788	60	64	69	68	66	64	66	74	61	70	62	63	1
	Females	703	56	52	62	44	60	56	69	62	61	59	63	59	

TABLE 4.—CONTINUED.—*Births by Counties, by Months, and by Sex.*

Counties.	Sex.	Year, 1888.	Months, 1888.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
Benzie.....	Totals.....	102	7	7	5	12	7	14	7	7	9	8	8	11	---
	Males.....	63	5	5	3	6	4	8	3	4	7	6	5	7	---
	Females.....	39	2	2	2	6	3	6	4	3	2	2	3	4	---
Berrien.....	Totals.....	610	43	54	56	54	50	48	48	44	53	49	47	64	---
	Males.....	322	20	31	30	30	25	32	28	19	20	23	29	35	---
	Females.....	288	23	23	26	24	25	16	20	25	33	26	18	29	---
Branch.....	Totals.....	351	16	25	36	42	22	27	32	37	23	29	32	30	---
	Males.....	176	6	14	19	16	13	13	16	22	8	12	20	17	---
	Females.....	175	10	11	17	26	9	14	16	15	15	17	12	13	---
Calhoun.....	Totals.....	651	40	39	58	58	59	44	65	53	75	58	47	54	1
	Males.....	334	20	19	34	36	30	18	31	27	46	29	15	29	---
	Females.....	317	20	20	24	22	29	26	34	26	29	29	32	25	1
Cass.....	Totals.....	338	24	19	19	34	17	25	35	36	44	23	35	22	---
	Males.....	190	16	10	11	21	8	16	19	22	26	14	14	13	---
	Females.....	148	8	9	8	13	9	9	16	14	18	14	21	9	---
Charlevoix.....	Totals.....	143	4	9	13	15	9	11	17	17	16	11	11	8	2
	Males.....	72	2	4	4	10	3	5	10	8	11	7	4	3	1
	Females.....	71	2	5	9	5	6	6	7	9	5	4	7	5	1
Cheboygan.....	Totals.....	317	29	24	27	25	32	31	31	25	22	22	17	32	---
	Males.....	159	16	6	10	11	9	21	22	15	8	11	11	19	---
	Females.....	158	13	18	17	14	23	10	9	10	14	11	6	13	---
Chippewa.....	Totals.....	178	19	14	17	15	9	20	13	25	20	8	3	15	---
	Males.....	92	12	6	6	11	5	9	4	17	13	4	---	5	---
	Females.....	86	7	8	11	4	4	11	9	8	7	4	3	10	---
Clare.....	Totals.....	153	10	12	10	18	17	17	12	13	14	10	8	11	1
	Males.....	68	5	5	4	9	3	10	4	6	11	4	3	4	---
	Females.....	85	5	7	6	9	14	7	8	7	3	6	5	7	1
Clinton.....	Totals.....	458	32	30	29	36	37	43	43	42	42	34	40	50	---
	Males.....	220	16	19	14	16	16	20	22	14	22	18	18	25	---
	Females.....	238	16	11	15	20	21	23	21	28	20	16	22	25	---
Crawford.....	Totals.....	16	---	1	2	1	---	2	---	---	1	5	3	1	---
	Males.....	9	---	1	1	1	---	1	---	---	1	3	1	---	---
	Females.....	7	---	---	1	---	---	1	---	---	---	2	2	1	---
Delta.....	Totals.....	378	24	27	29	40	31	22	27	33	44	25	46	29	1
	Males.....	200	12	10	15	21	16	11	15	18	27	13	24	18	---
	Females.....	178	12	17	14	19	15	11	12	15	17	12	22	11	1

BIRTHS, BY COUNTIES, BY MONTHS, BY SEX.

19

TABLE 4.—CONTINUED.—*Births by Counties, by Months, and by Sex.*

Counties.	Sex.	Year, 1888.	Months, 1888.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
Eaton.....	Totals.....	468	20	30	34	48	51	48	39	47	45	39	33	34	---
	Males.....	225	11	17	17	22	25	25	16	19	21	18	14	20	---
	Females.....	242	9	13	17	26	25	23	23	28	24	21	19	14	---
	Unknown.....	1	---	---	---	---	1	---	---	---	---	---	---	---	---
Emmet.....	Totals.....	121	11	17	12	14	11	6	12	14	5	5	8	5	1
	Males.....	64	6	8	7	8	7	3	4	8	3	1	4	5	---
	Females.....	57	5	9	5	6	4	3	8	6	2	4	4	---	1
	Unknown.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Genesee.....	Totals.....	541	37	41	35	47	33	49	54	44	42	52	52	53	2
	Males.....	265	17	22	20	25	19	25	28	21	23	20	21	24	---
	Females.....	275	20	19	15	22	14	24	26	23	19	32	31	29	1
	Unknown.....	1	---	---	---	---	---	---	---	---	---	---	---	---	1
Gladwin.....	Totals.....	53	5	8	4	2	6	2	4	8	7	2	3	2	---
	Males.....	30	2	7	1	---	3	1	4	4	3	1	3	1	---
	Females.....	23	3	1	3	2	3	1	---	4	4	1	---	1	---
	Unknown.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Gogebic.....	Totals.....	251	13	11	13	23	25	31	27	25	22	24	15	21	1
	Males.....	146	11	6	6	10	11	20	19	16	13	13	9	11	1
	Females.....	105	2	5	7	13	14	11	8	9	9	11	6	10	---
	Unknown.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Grand Traverse.....	Totals.....	247	10	15	17	16	20	24	34	35	27	18	11	20	---
	Males.....	134	4	8	10	9	12	17	17	18	13	8	8	10	---
	Females.....	113	6	7	7	7	8	7	17	17	14	10	3	10	---
	Unknown.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Gratiot.....	Totals.....	473	23	44	40	40	46	46	48	43	42	31	36	33	1
	Males.....	240	12	28	22	17	28	22	22	19	16	15	18	20	1
	Females.....	231	11	15	18	23	18	24	26	24	26	15	18	13	---
	Unknown.....	2	---	1	---	---	---	---	---	---	---	1	---	---	---
Hillsdale.....	Totals.....	338	20	21	27	27	31	28	23	29	23	34	41	24	---
	Males.....	169	8	7	16	15	16	10	13	17	15	19	20	13	---
	Females.....	169	12	14	11	12	15	18	15	12	13	15	21	11	---
	Unknown.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Houghton.....	Totals.....	1,022	82	56	94	66	92	95	91	90	90	64	86	116	---
	Males.....	554	47	24	60	28	55	46	49	50	46	44	41	64	---
	Females.....	468	35	32	34	38	37	49	42	40	44	20	45	52	---
	Unknown.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Huron.....	Totals.....	671	42	39	69	50	59	52	50	76	55	58	59	62	---
	Males.....	345	22	19	30	27	31	21	23	34	33	30	39	31	---
	Females.....	326	20	20	39	23	28	31	22	42	22	28	20	31	---
	Unknown.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Ingham.....	Totals.....	491	36	34	32	31	44	43	46	43	54	36	37	49	1
	Males.....	245	17	19	19	14	26	16	23	23	19	19	21	23	1
	Females.....	246	19	15	13	17	18	27	18	25	35	17	16	26	---
	Unknown.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE 4.—CONTINUED.—*Births by Counties, by Months, and by Sex.*

Counties.	Sex.	Year, 1888.	Months, 1888.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
Ionia.....	Totals.....	440	33	15	32	49	48	37	35	38	46	35	37	34	1
	Males.....	221	15	6	14	24	27	19	18	25	21	14	17	21	
	Females.....	219	18	9	18	25	21	18	17	13	25	21	20	13	1
Iosco.....	Totals.....	300	16	34	26	33	30	24	14	26	32	19	20	26	
	Males.....	151	8	16	12	12	16	15	9	12	15	10	13	13	
	Females.....	149	8	18	14	21	14	9	5	14	17	9	7	13	
Iron.....	Totals.....	97	6	11	5	12	6	18	9	6	4	5	5	10	
	Males.....	48	3	6	2	5	4	5	4	2	1	2	5	4	
	Females.....	54	3	5	3	7	2	13	5	4	3	3		6	
Isabella.....	Totals.....	432	29	28	32	35	41	41	48	47	42	27	39	23	
	Males.....	224	12	10	14	20	19	24	33	25	20	14	19	14	
	Females.....	208	17	18	18	15	22	17	15	22	22	13	20	9	
Jackson.....	Totals.....	579	43	49	55	46	46	44	55	58	54	38	43	47	1
	Males.....	308	21	30	27	25	29	25	31	26	31	22	18	22	1
	Females.....	271	22	19	28	21	17	19	24	32	23	16	25	25	
Kalamazoo.....	Totals.....	679	35	56	53	62	53	60	53	67	69	57	60	53	1
	Males.....	342	23	28	25	36	29	32	25	26	37	25	32	24	
	Females.....	337	12	28	28	26	24	28	28	41	32	32	28	29	1
Kalkaska.....	Totals.....	102	6	8	8	5	6	13	11	14	11	5	9	6	
	Males.....	44	1	3	5	2	2	6	6		2	3	4	3	
	Females.....	58	5	5	3		4	7	5		9	2	5	3	
Kent.....	Totals.....	2,079	144	142	168	161	168	174	190	192	205	179	152	202	2
	Males.....	1,083	79	71	94	86	87	78	98	101	105	94	74	114	2
	Females.....	996	65	71	74	75	81	96	92	91	100	85	78	88	
Keweenaw.....	Totals.....	118	11	7	9	11	9	9	9	13	9	9	10	12	
	Males.....	73	8	5	3	4	6	6	7		6	4	6	10	
	Females.....	45	3	2	6	7	3	3	2		3	5	4	2	
Lake.....	Totals.....	90	4	8	13	13	7	6	7		7	10	4	7	
	Males.....	35	2	2	4	7	4	2	2	4	2	4	1	1	
	Females.....	55	2	6	9	6	3	4	5		5	6	3	6	
Lapeer.....	Totals.....	481	31	26	31	32	43	47	56	59	46	42	27	41	
	Males.....	261	14	14	17	21	23	23	30	31	27	17	16	28	
	Females.....	217	14	12	14	11	20	24	26	28	19	25	11	13	
	Unknown.....	3	3												
Leelanaw.....	Totals.....	232	9	21	19	21	13	23	24	28	27	24	11	12	
	Males.....	114	4	11	7	11	7	14	11	17	12	10	6	4	
	Females.....	118	5	10	12	10	6	9	13	11	15	14	5	8	

BIRTHS, BY COUNTIES, BY MONTHS, BY SEX.

21

TABLE 4.—CONTINUED.—*Births by Counties, by Months, and by Sex.*

Counties.	Sex.	Year, 1888.	Months, 1888.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
Lenawee	Totals	632	35	47	54	70	48	55	48	68	47	64	46	46	4
	Males	320	16	21	26	38	28	26	24	31	22	43	20	22	3
	Females	312	19	26	28	32	20	29	24	37	25	21	26	24	1
Livingston	Totals	304	14	26	24	27	35	30	24	32	25	18	25	24	
	Males	151	5	12	8	14	19	18	13	17	13	10	12	15	
	Females	153	9	14	16	13	16	17	11	15	12	8	13	9	
Luce	Totals	19	2	2	2	1	2	2	1		3	1	2	1	
	Males	10	1	1			2	2	1		2		1		
	Females	9	1	1	2	1					1	1	1	1	
Mackinac	Totals	120	9	4	11	13	11	4	7	10	10	9	11	19	2
	Males	67	6	2	6	10	7	3	4	7	2	3	8	9	
	Females	52	3	2	5	3	4	1	3	3	8	6	3	10	1
	Unknown	1													1
Macomb	Totals	687	45	61	58	44	52	50	65	58	58	61	66	69	
	Males	352	21	38	26	22	24	23	36	24	30	38	30	40	
	Females	335	24	23	32	22	28	27	29	34	28	23	36	29	
Manistee	Totals	696	27	48	61	52	49	61	73	79	58	73	57	58	
	Males	395	18	25	34	26	23	41	41	44	32	44	28	39	
	Females	301	9	23	27	26	26	20	32	35	26	29	29	19	
Manitou	Totals	10				1	1	2		2		1	1	2	
	Males	5				1				1		1	1	1	
	Females	5					1	2		1				1	
Marquette	Totals	1,049	54	78	101	87	106	101	83	89	77	89	92	92	
	Males	544	26	40	61	47	50	46	46	45	35	45	50	53	
	Females	505	28	38	40	40	56	55	37	44	42	44	42	39	
Mason	Totals	334	13	28	24	24	23	31	27	47	37	32	23	25	
	Males	169	7	17	9	12	15	17	11	22	18	12	15	14	
	Females	165	6	11	15	12	8	14	16	25	19	20	8	11	
Mecosta	Totals	375	17	22	29	28	38	34	38	30	35	39	35	30	
	Males	177	6	8	12	12	14	18	21	13	25	18	14	16	
	Females	198	11	14	17	16	24	16	17	17	10	21	21	14	
Menominee	Totals	841	63	72	80	82	78	70	67	64	74	60	69	61	1
	Males	437	37	38	41	38	38	31	33	32	37	38	36	37	1
	Females	404	26	34	39	44	40	39	34	32	37	22	33	24	
Midland	Totals	260	10	16	18	29	20	19	36	20	23	24	16	29	
	Males	151	8	9	12	16	10	8	22	12	10	13	10	21	
	Females	109	2	7	6	13	10	11	14	8	13	11	6	8	

VITAL STATISTICS OF MICHIGAN, 1888.

TABLE 4.—CONTINUED.—*Births by Counties, by Months, and by Sex.*

Counties.	Sex.	Year, 1888.	Months, 1888.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
Missaukee	Totals	86	9	2	2	5	9	6	7	8	9	9	6	14	
	Males	49	7		1	4	7	5	3	2	8	6	1	5	
	Females	37	2	2	1	1	2	1	4	6	1	3	5	9	
Monroe	Totals	670	44	37	59	39	53	65	59	60	71	57	74	52	
	Males	341	22	19	33	25	24	33	27	32	31	26	39	30	
	Females	327	22	18	26	14	29	32	32	28	39	31	34	22	
	Unknown	2									1		1		
Montcalm	Totals	598	43	35	43	48	49	54	63	63	55	45	41	58	1
	Males	315	22	16	28	16	32	28	33	34	26	22	24	34	
	Females	283	21	19	15	32	17	26	30	29	29	23	17	24	1
Montmorency	Totals	26	4		3	2	4	3	1	2	4	1	1	1	
	Males	12	2		2		3	2	1			1	1		
	Females	14	2		1	2	1	1		2	4			1	
Muskegon	Totals	1,139	95	82	92	81	81	92	83	115	85	120	100	113	
	Males	617	48	42	59	44	45	43	51	64	47	57	52	65	
	Females	521	47	40	33	37	36	48	32	51	38	63	48	48	
	Unknown	1						1							
Newaygo	Totals	329	25	20	23	32	28	22	29	28	30	31	37	24	
	Males	161	17	10	10	16	12	7	13	16	12	13	20	15	
	Females	168	8	10	13	16	16	15	16	12	18	18	17	9	
Oakland	Totals	489	23	33	45	46	38	41	34	45	57	50	39	37	1
	Males	262	13	22	22	23	14	25	16	27	29	32	21	18	
	Females	227	10	11	23	23	24	16	18	18	28	18	18	19	1
Oceana	Totals	282	17	15	29	21	20	31	22	24	35	30	24	14	
	Males	141	14	6	18	10	8	14	9	11	18	14	9	10	
	Females	141	3	9	11	11	12	17	13	13	17	16	15	4	
Ogemaw	Totals	117	12	4	8	13	5	9	11	16	10	7	10	12	
	Males	68	9	2	5	9	3	4	6	7	7	5	3	8	
	Females	49	3	2	3	4	2	5	5	9	3	2	7	4	
Ontonagon	Totals	54		3	3	4	8	7	6	1	3	6	5	8	
	Males	34		2	2	2	6	5	4	1	2	5	2	3	
	Females	16			1	2	2	2	1		1	1	2	4	
	Unknown	4		1					1				1	1	
Osceola	Totals	341	19	19	38	30	24	36	31	39	38	25	22	20	
	Males	183	10	7	20	15	12	14	19	24	25	15	13	9	
	Females	158	9	12	18	15	12	22	12	15	13	10	9	11	

TABLE 4.—CONTINUED.—*Births by Counties, by Months, and by Sex.*

Counties.	Sex.	Year, 1888.	Months, 1888.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
Oscoda	Totals	8					1	3	1	1		1		1	
	Males	4					1	2						1	
	Females	4						1	1	1		1			
Otsego	Totals	64	3	5	7	7	9	7	10	3	5	4		3	1
	Males	34	2	2	3	3	5	5	7	2	1	2		2	
	Females	30	1	3	4	4	4	2	3	1	4	2		1	1
Ottawa	Totals	919	65	62	87	69	68	92	94	77	84	78	65	77	1
	Males	444	28	36	43	23	33	42	47	46	35	44	36	30	1
	Females	475	37	26	44	46	35	50	47	31	49	34	29	47	
Presque Isle	Totals	127	13	8	14	5	9	8	10	13	15	15	11	6	
	Males	70	5	4	9	1	5	5	4	9	11	8	4	5	
	Females	55	8	4	5	3	4	3	5	4	4	7	7	1	
	Unknown	2				1			1						
Roscommon	Totals	33	6	5	1	2	1	2	4	1	2	2	3	4	
	Males	17	3	3	1	1		1	2		1	1	3	1	
	Females	16	3	2		1	1	1	2	1	1	1		3	
Saginaw	Totals	2,156	133	169	163	184	180	196	191	227	216	160	167	168	2
	Males	1,168	71	88	80	89	101	102	97	126	129	91	100	93	1
	Females	987	62	81	83	95	79	94	94	101	86	69	67	75	1
	Unknown	1									1				
Sanilac	Totals	719	37	55	56	69	58	55	66	71	70	61	59	62	
	Males	360	15	32	35	34	27	27	34	31	36	28	27	34	
	Females	359	22	23	21	35	31	28	32	40	34	33	32	28	
Schoolcraft	Totals	102	4	12	14	9	8	7	4	11	5	8	9	10	1
	Males	56	3	4	8	4	2	5	1	8	2	5	5	9	
	Females	45	1	8	6	4	6	2	3	3	3	3	4	1	1
	Unknown	1				1									
Shiawassee	Totals	369	24	19	20	30	36	36	35	38	41	22	32	35	1
	Males	203	12	11	11	16	24	20	17	17	21	11	18	24	1
	Females	166	12	8	9	14	12	16	18	21	20	11	14	11	
St. Clair	Totals	1,050	78	69	78	52	83	73	104	115	95	103	101	97	2
	Males	557	40	42	37	29	44	37	55	73	51	52	54	42	1
	Females	493	38	27	41	23	39	36	49	42	44	51	47	55	1
St. Joseph	Totals	438	26	29	37	45	30	33	33	39	43	51	37	35	
	Males	251	16	18	20	27	22	18	20	20	23	31	18	18	
	Females	187	10	11	17	18	8	15	13	19	20	20	19	17	

TABLE 4.—CONTINUED.—*Births by Counties, by Months, and by Sex.*

Counties.	Sex.	Year, 1888.	Months, 1888.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
Tuscola.....	Totals.....	605	34	25	46	55	55	55	56	65	56	54	56	48	---
	Males.....	287	18	15	23	21	23	28	28	31	25	29	16	30	---
	Females.....	318	16	10	23	34	32	27	28	34	31	25	40	18	---
Van Buren.....	Totals.....	538	39	38	45	47	41	39	45	61	58	46	29	48	2
	Males.....	285	17	19	28	30	25	23	27	31	28	20	10	26	1
	Females.....	253	22	19	17	17	16	16	18	30	30	26	19	22	1
Washtenaw.....	Totals.....	547	38	41	45	37	43	45	41	39	71	40	59	48	---
	Males.....	290	22	21	22	20	20	30	20	20	35	24	32	24	---
	Females.....	257	16	20	23	17	23	15	21	19	36	16	27	24	---
Wayne.....	Totals.....	14,046	1264	1064	1216	1071	1312	1128	1098	1158	1159	1371	984	1216	5
	Males.....	7,325	642	566	601	573	662	596	554	633	587	709	525	673	4
	Females.....	6,715	622	496	615	497	649	532	543	525	572	662	459	542	1
	Unknown.....	6	---	2	---	1	1	---	1	---	---	---	---	1	---
Wexford.....	Totals.....	256	20	25	25	20	18	18	30	25	23	17	15	20	---
	Males.....	137	11	8	15	12	10	11	17	14	11	8	10	10	---
	Females.....	119	9	17	10	8	8	7	13	11	12	9	5	10	---

Table 5 shows the number of inhabitants, the number of births, the birth-rates, and the proportion of the sexes among the different races in Michigan. It is unfortunate in the study of this table that the population is not given for the year in which the returns are made. The census returns of 1884 are the only trustworthy basis on which to make the computations of the present work. The increase in population has, no doubt, been considerable, and this should be considered when comparisons are made with previous years.

By an examination of the column headed "Per cent of children born to inhabitants," it will be observed that the birth-rate is about the same for the white inhabitants as the average for all colors, and greater than the average among the blacks, which was also true for the year 1887.

The birth-rate among the black and mulatto inhabitants, which includes all of African descent, was less than that of the average for all races or the whites. By removing the decimal point one place to the right it shows the birth-rate to each thousand inhabitants. When this is done, there were 26.6 births to each thousand among the white; 34.3 among the black, 13.0 among the mulatto; 19.1 among the indian, and 22.6 among the black and mulatto taken together.

An examination of Table 6, shows much that is interesting and instructive in regard to the birth-rate in the different counties of the State. In this table the births and birth-rate of each county may be compared with those of other counties and also with that of the State as a whole. Some allowance should be made, in the study of this table, for defective registration which is probably greater in some counties than in others. Under no system of registration yet devised has there been a complete record of all the births in a county or State. It is this greater or less number as the case may be, depending very much upon the official who does the collecting of the returns, that affects the birth-rate not only in the town from which the returns come but also that for the entire State. Those counties showing the highest birth-rates for the year 1888, according to the returns, were Alpena, Bay, Cheboygan, Delta, Houghton, Manistee, Marquette, Menominee, Muskegon and Wayne. Those showing the lowest were Allegan, Berrien, Branch, Eaton, Genesee, Hillsdale, Jackson, Lenawee, Oakland, Shiawassee and Washtenaw.

Each year the returns show about the same representation, the first named counties having the highest birth-rates, and the latter counties show a rate considerably less than that of the State as a whole.

These facts indicate that in the manufacturing and mining towns and cities the birth-rate is highest, while in the towns and cities where little or no manufacturing is carried on, and agricultural interests largely predominate, the birth-rate is much lower. This leads to the conclusion that mercantile, industrial and manufacturing pursuits have a greater attraction for the younger element of our population than the more quiet work on our farms, and thus the young men and women are drawn from the country into the cities. A large proportion of our foreign population is also found in these manufacturing centers and the percentage of births from this class is usually very large.

TABLE 5.—*Exhibiting, by Color and Sex, the Population of Michigan June 1, 1884, the number of Births returned for the year 1888, the Per Cent of Births to Population, and the Per Cent of Births of each Sex to the total of both Sexes. (Still-births included.)*

Race or Color.	Sex.	Population June 1, 1884, Represented by Births in 1888.	Children Born in 1888.	Per cent of Births of each Color to Total of all Colors by Sex.	Per Cent of Children Born to Inhabitants.	Per Cent of each Sex to Children of both Sexes.	Inhabitants to one child born, by Color and Sex.
All colors	Totals	a 1,847,234	48,952	100.00	2.65		37.74
	Males	970,609	25,526	100.00	2.63	52.17	38.02
	Females	876,419	23,401	100.00	2.67	47.83	37.45
	Unknown	206	25				
White	Totals	1,824,196	48,463	99.00	2.66		37.64
	Males	958,639	25,284	99.05	2.64	52.19	37.91
	Females	865,547	23,162	98.98	2.68	47.81	37.37
	Unknown	10	17				
Black	Totals	6,855	235	.48	3.43		29.17
	Males	3,691	115	.45	3.12	48.94	32.10
	Females	3,164	120	.51	3.79	51.06	26.37
Mulatto	Totals	8,257	107	.22	1.30		77.17
	Males	4,201	58	.22	1.38	54.21	72.43
	Females	4,056	49	.21	1.21	45.79	82.78
Indian	Totals	6,815	130	.27	1.91		52.42
	Males	3,531	63	.25	1.78	48.46	56.05
	Females	3,284	67	.29	2.04	51.54	49.01
Unknown color	Totals	1,041	17	.03	1.63		61.24
	Males	477	6	.03	1.26	66.67	79.50
	Females	363	3	.01	.82	33.33	122.67
	Unknown	196	8				
Black and mulatto	Totals	15,112	342	.70	2.26		44.19
	Males	7,892	173	.67	2.19	50.58	45.62
	Females	7,220	169	.72	2.34	49.42	42.72

a Includes 70 Asiatic males.

TABLE 6.—*Exhibiting, for the State and Counties of Michigan, by Sex, the Population in 1884, the Per Cent of Births in 1888 to Population the Number of Males to 100 Females, and by Sex and Color, the Births returned for 1888. (Still-births included.)*

State and Counties.	Births—Males to 100 females.	Sex.	Per cent of births of each sex to total of both sexes.	Population in 1884, represented by births in 1888.	Per cent of births of each sex to population of same sex.	Color,—Children born in 1888.				
						Total of all colors.	White.	Black.	Mulatto.	Indian.
State	109	Totals		1,847,234	2.65	48,952	48,463	235	107	130
		Males	52.17	970,809	2.65	25,526	25,284	115	58	63
		Females	47.83	876,419	2.67	23,401	23,162	120	49	67
		Unknown		206		25	17			
Alcona	148	Totals		4,028	1.54	62	62			
		Males	59.68	2,428	1.52	37	37			
		Females	40.32	1,600	1.56	25	25			
Alcona	77	Totals				23	21			2
		Males	43.48			10	9			1
		Females	56.52			13	12			1
Allegan	103	Totals		38,666	1.98	767	762	2	3	
		Males	50.72	20,052	1.94	389	387	1	1	
		Females	49.28	18,614	2.03	378	375	1	2	
Alpena	123	Totals		12,483	3.22	409	409			
		Males	55.26	6,990	3.23	226	226			
		Females	44.74	5,693	3.21	183	183			
Antrim	132	Totals		8,761	2.31	202	200		2	
		Males	56.93	4,736	2.43	115	113		2	
		Females	43.07	4,025	2.16	87	87			
Arenac	98	Totals		4,027	3.15	127	127			
		Males	49.61	2,319	2.72	63	63			
		Females	50.39	1,708	3.75	64	64			
Baraga	94	Totals		3,039	2.44	74	67			7
		Males	48.65	1,819	1.98	36	33			3
		Females	51.35	1,220	3.11	38	34			4
Barry	113	Totals		24,102	1.50	362	362			
		Males	53.04	12,507	1.54	192	192			
		Females	46.96	11,595	1.47	170	170			

a Organized since census was taken.

TABLE 6.—CONTINUED.—*Births by Counties, by Sex, and by Color.*

Counties.	Births—Males to 100 females.	Sex.	Per cent of births of each sex to total of both sexes.	Population in 1884, represented by births in 1888.	Per cent of births of each sex to popula- tion of same sex.	Color,—Children born in 1888.					
						Total of all colors.	White.	Black.	Mulatto.	Indian.	Unknown.
Bay	112	Totals		51,221	2.91	1,491	1,489	2			
		Males	52.85	28,215	2.75	788	787	1			
		Females	47.15	23,006	3.06	703	702	1			
Benzie	162	Totals		4,389	2.32	102	100	1	1		
		Males	61.76	2,349	2.68	63	61	1	1		
		Females	38.24	2,040	1.91	39	39				
Berrien	112	Totals		37,776	1.61	610	608	1	1		
		Males	52.79	19,225	1.67	322	322				
		Females	47.21	18,551	1.55	288	286	1	1		
Branch	101	Totals		27,661	1.27	351	351				
		Males	50.14	14,042	1.25	176	176				
		Females	49.86	13,619	1.28	175	175				
Calhoun	105	Totals		41,585	1.57	651	644	2	5		
		Males	51.31	21,297	1.57	334	330	1	3		
		Females	48.69	20,285	1.56	317	314	1	2		
		Unknown		3							
Cass	128	Totals		21,202	1.59	338	304	31	2	1	
		Males	56.21	10,886	1.75	190	172	16	2		
		Females	43.79	10,316	1.43	148	132	15		1	
Charlevoix	101	Totals		9,275	1.54	143	137			6	
		Males	50.35	5,080	1.43	72	69			3	
		Females	49.65	4,245	1.67	71	68			3	
Cheboygan	101	Totals		9,946	3.19	317	311			6	
		Males	50.16	5,503	2.89	159	154			5	
		Females	49.84	4,443	3.56	158	157			1	
Chippewa	107	Totals		7,407	2.40	178	171			7	
		Males	51.69	4,121	2.23	92	89			3	
		Females	48.31	3,286	2.62	86	82			4	
Clare	80	Totals		5,549	2.76	153	153				
		Males	44.44	3,251	2.09	68	68				
		Females	55.56	2,298	3.70	85	85				
Clinton	92	Totals		27,135	1.69	458	458				
		Males	48.03	14,034	1.57	230	220				
		Females	51.97	13,101	1.82	238	238				
Crawford	129	Totals		2,389	.67	16	16				
		Males	56.25	1,381	.65	9	9				
		Females	43.75	1,008	.69	7	7				

TABLE 6.—CONTINUED.—*Births by Counties, by Sex, and by Color.*

Counties.	Births.—Males to 100 females.	Sex.	Per cent of births of each sex to total of both sexes.	Population in 1884, represented by births in 1888.	Per cent of births of each sex to population of same sex.	Color,—Children born in 1888.				
						Total of all colors.	White.	Black.	Mulatto.	Indian.
Delta.....	112	Totals.....		9,992	3.78	378	378		1	1
		Males.....	52.91	5,876	3.40	200	200			
		Females.....	47.09	4,116	4.32	178	178		1	1
Eaton.....	98	Totals.....		31,802	1.47	468	467		1	
		Males.....	48.18	16,210	1.39	225	225			
		Females.....	51.82	15,592	1.55	242	241		1	
		Unknown.....				1	1			
Emmet.....	112	Totals.....		7,944	1.52	121	96			25
		Males.....	52.89	4,095	1.56	64	50			14
		Females.....	47.11	3,849	1.48	57	46			11
Genesee.....	96	Totals.....		33,776	1.40	541	530	4	6	1
		Males.....	49.07	19,782	1.34	265	258	4	3	
		Females.....	50.93	18,994	1.45	275	272		3	
		Unknown.....				1				1
Gladwin.....	130	Totals.....		1,539	3.44	58	53			
		Males.....	56.60	899	3.34	30	30			
		Females.....	43.40	640	3.59	28	23			
Gogebic a.....	139	Totals.....				251	251			
		Males.....	58.17			146	146			
		Females.....	41.83			105	105			
Gr. Traverse.....	119	Totals.....		12,092	2.04	247	247			
		Males.....	54.25	6,522	2.05	134	134			
		Females.....	45.75	5,570	2.03	113	113			
Gratiot.....	104	Totals.....		25,049	1.89	473	470	1	2	
		Males.....	50.96	13,204	1.82	240	240			
		Females.....	49.04	11,845	1.95	231	228	1	2	
		Unknown.....				2	2			
Hilledale.....	100	Totals.....		31,696	1.07	338	337		1	
		Males.....	50.00	15,911	1.06	169	169			
		Females.....	50.00	15,775	1.07	169	168		1	
Houghton.....	118	Totals.....		26,146	3.91	1,022	1,021	1		
		Males.....	54.21	14,168	3.91	554	553	1		
		Females.....	45.79	11,978	3.91	468	468			
Huron.....	106	Totals.....		24,521	2.74	671	671			
		Males.....	51.42	12,934	2.67	345	345			
		Females.....	48.58	11,585	2.81	326	326			
		Unknown.....		2						

a Organized since census was taken.

VITAL STATISTICS OF MICHIGAN, 1888.

TABLE 6.—CONTINUED.—*Births by Counties, by Sex, and by Color.*

Counties.	Births, Males to 100 females.	Sex.	Per cent of births of each sex to total of both sexes.	Population in 1884, represented by births in 1888.	Per cent of births of each sex to population of same sex.	Color.—Children born in 1888.					
						Total of all colors.	White.	Black.	Mulatto.	Indian.	Unknown.
Ingham	99	Totals		34,939	1.41	491	488	2	1		
		Males	49.90	17,917	1.37	245	244	1			
		Females	50.10	17,022	1.45	246	244	1	1		
Ionia	101	Totals		32,559	1.35	440	439		1		
		Males	50.23	17,057	1.30	221	220		1		
		Females	49.77	15,502	1.41	219	219				
Iosco	101	Totals		10,602	2.83	300	299		1		
		Males	50.33	6,060	2.49	*151	151				
		Females	49.67	4,542	3.28	149	148		1		
Iron a	80	Totals				97	97				
		Males	44.33			43	43				
		Females	55.67			54	54				
Isabella	108	Totals		16,011	2.70	432	419		1	12	
		Males	51.85	8,597	2.61	224	217		1	6	
		Females	48.15	7,414	2.81	208	202			6	
Jackson	114	Totals		45,232	1.28	579	567	2	1		9
		Males	53.20	23,385	1.32	308	301	1			6
		Females	46.80	21,847	1.24	271	266	1	1		3
Kalamazoo	101	Totals		35,281	1.92	679	671	4	4		
		Males	50.37	17,875	1.91	342	338	3	1		
		Females	49.63	17,406	1.92	337	333	1	3		
Kalkaska	76	Totals		4,076	2.50	102	102				
		Males	43.14	2,229	1.97	44	44				
		Females	56.86	1,847	3.14	58	58				
Kent	109	Totals		84,600	2.46	2,079	2,068	5	4	2	
		Males	52.09	43,467	2.49	1,083	1,074	4	3	2	
		Females	47.91	41,133	2.42	996	994	1	1		
Keweenaw	162	Totals		4,667	2.53	118	118				
		Males	61.86	2,551	2.86	73	73				
		Females	38.14	2,116	2.13	45	45				
Lake	64	Totals		6,894	1.31	90	90				
		Males	38.89	4,120	.85	35	35				
		Females	61.11	2,774	1.98	55	55				
Lapeer	120	Totals		30,057	1.60	481	479			1	1
		Males	54.60	15,598	1.68	261	261				
		Females	45.40	14,489	1.50	217	216			1	
		Unknown				3	2				1

a Organized since census was taken.

TABLE 6.—CONTINUED.—*Births by Counties, by Sex, and by Color.*

Counties.	Births—Males to 100 females.	Sex.	Per cent of births of each sex to total of both sexes.	Population in 1884 represented by births in 1888.	Per cent of births of each sex to population of same sex.	Color,—Children born in 1888.					
						Total of all colors.	White.	Black.	Mulatto.	Indian.	Unknown.
Leelanaw	97	Totals .....	.....	7,128	3.25	232	206	.....	.....	26	.....
		Males	49.14	3,842	2.97	114	104	.....	.....	10	.....
		Females	50.86	3,286	3.59	118	102	.....	.....	16	.....
Lenawee	108	Totals .....	.....	49,584	1.27	632	627	3	2	.....	.....
		Males	50.68	24,916	1.28	320	317	1	2	.....	.....
		Females	49.37	24,668	1.26	312	310	2	.....	.....	.....
Livingston	99	Totals .....	.....	21,568	1.41	304	304	.....	.....	.....	.....
		Males	49.67	11,254	1.34	151	151	.....	.....	.....	.....
		Females	50.33	10,314	1.48	153	153	.....	.....	.....	.....
Luce. *	111	Totals .....	.....	.....	.....	19	19	.....	.....	.....	.....
		Males	52.63	.....	.....	10	10	.....	.....	.....	.....
		Females	47.37	.....	.....	9	9	.....	.....	.....	.....
Mackinac	129	Totals .....	.....	5,171	2.32	120	104	.....	.....	16	.....
		Males	56.30	2,948	2.27	67	58	.....	.....	9	.....
		Females	43.70	2,223	2.34	52	45	.....	.....	7	.....
		Unknown .....	.....	.....	.....	1	1	.....	.....	.....	.....
Macomb	105	Totals .....	.....	31,293	2.20	687	685	2	.....	.....	.....
		Males	51.24	15,978	2.20	352	351	1	.....	.....	.....
		Females	48.76	15,315	2.19	335	334	1	.....	.....	.....
Manistee	131	Totals .....	.....	19,875	3.50	696	695	.....	.....	1	.....
		Males	56.75	10,879	3.68	395	394	.....	.....	1	.....
		Females	43.25	8,996	3.35	301	301	.....	.....	.....	.....
Manitou	100	Totals .....	.....	1,198	.80	10	10	.....	.....	.....	.....
		Males	50.00	547	.98	5	5	.....	.....	.....	.....
		Females	50.00	456	1.10	5	5	.....	.....	.....	.....
		Unknown .....	.....	195	.....	.....	.....	.....	.....	.....	.....
Marquette	108	Totals .....	.....	31,027	3.38	1,049	1,048	.....	1	.....	.....
		Males	51.86	17,375	3.13	544	544	.....	.....	.....	.....
		Females	48.14	13,652	3.70	505	504	.....	1	.....	.....
Mason	102	Totals .....	.....	13,221	2.53	334	332	.....	.....	2	.....
		Males	50.60	7,232	2.34	169	169	.....	.....	.....	.....
		Females	49.40	5,989	2.76	165	163	.....	.....	2	.....
Mecosta	89	Totals .....	.....	19,801	1.89	375	371	4	.....	.....	.....
		Males	47.20	10,855	1.63	177	175	2	.....	.....	.....
		Females	52.80	8,946	2.21	198	196	2	.....	.....	.....

* Organized since census was taken.

TABLE 6.—CONTINUED.—*Births by Counties, by Sex, and by Color.*

Counties.	Births.—Males to 100 females.	Sex.	Per cent of births of each sex to total of both sexes.	Population in 1884 represented by births in 1888.	Per cent of births of each sex to population of same sex.	Color.—Children born in 1888.				
						Total of all colors.	White.	Black.	Mulatto.	Indian.
Menominee	108	Totals		19,120	4.40	841	839			2
		Males	51.96	11,488	3.80	437	437			
		Females	48.04	7,632	5.58	404	402			2
Midland	139	Totals		8,776	2.96	260	255		5	
		Males	58.08	4,728	3.19	151	149		2	
		Females	41.92	4,048	2.69	109	106		3	
Missaukee	132	Totals		3,148	2.73	86	86			
		Males	56.98	1,903	2.57	49	49			
		Females	43.02	1,245	2.97	37	37			
Monroe	104	Totals		33,353	2.01	670	669		1	
		Males	51.05	17,186	1.98	341	340		1	
		Females	48.95	16,167	2.02	327	327			
		Unknown				2	2			
Montcalm	111	Totals		35,356	1.69	598	596		2	
		Males	52.68	18,774	1.68	315	315			
		Females	47.32	16,581	1.71	283	281		2	
		Unknown		1						
Montmorency	86	Totals		845	3.08	26	26			
		Males	46.15	494	2.43	12	12			
		Females	53.85	351	3.99	14	14			
Muskegon	118	Totals		37,554	3.03	1,139	1,137	2		
		Males	54.22	20,522	3.01	617	616	1		
		Females	45.78	17,029	3.06	521	520	1		
		Unknown		3		1	1			
Newaygo	96	Totals		17,641	1.86	329	328		1	
		Males	48.94	9,917	1.62	161	161			
		Females	51.06	7,724	2.18	168	167		1	
Oakland	115	Totals		41,100	1.19	489	487	2		
		Males	53.58	20,821	1.26	262	261	1		
		Females	46.42	20,279	1.12	227	226	1		
Oceana	100	Totals		14,519	1.94	282	278			4
		Males	50.00	7,859	1.79	141	139			2
		Females	50.00	6,660	2.12	141	139			2
Ogemaw	139	Totals		3,637	3.22	117	117			
		Males	58.12	2,041	3.33	68	68			
		Females	41.88	1,596	3.07	49	49			

TABLE 6.—CONTINUED.—*Births by Counties, by Sex, and by Color.*

Counties.	Births.—Males to 100 females.	Sex.	Per cent of births of each sex to total of both sexes.	Population in 1884 represented by births in 1888.	Per cent of births of each sex to popula- tion of same sex.	Color.—Children born in 1888.				
						Total of all colors.	White.	Black.	Mixed.	Indian.
Ontonagon	213	Totals.....	.....	4,836	1.12	54	52	.....	.....	2
		Males.....	68.00	3,329	1.02	34	32	.....	.....	2
		Females.....	32.00	1,507	1.06	16	16	.....	.....	.....
		Unknown.....	.....	.....	.....	4	4	.....	.....	.....
Osceola	116	Totals.....	.....	14,001	2.44	341	341	.....	.....	.....
		Males.....	58.87	7,533	2.43	183	183	.....	.....	.....
		Females.....	46.38	6,468	2.44	158	158	.....	.....	.....
Oscoda	100	Totals.....	.....	738	1.08	8	8	.....	.....	.....
		Males.....	50.00	407	.98	4	4	.....	.....	.....
		Females.....	50.00	331	1.21	4	4	.....	.....	.....
Otsego	113	Totals.....	.....	3,906	1.64	64	64	.....	.....	.....
		Males.....	53.13	2,223	1.53	34	34	.....	.....	.....
		Females.....	46.87	1,683	1.78	30	30	.....	.....	.....
Ottawa	93	Totals.....	.....	36,225	2.54	919	916	.....	.....	3
		Males.....	48.31	18,970	2.34	444	443	.....	.....	1
		Females.....	51.69	17,255	2.75	475	473	.....	.....	2
Presque Isle.....	127	Totals.....	.....	4,064	3.13	127	124	1	.....	2
		Males.....	56.00	2,168	3.23	70	70	.....	.....	.....
		Females.....	44.00	1,896	2.90	55	54	1	.....	.....
		Unknown.....	.....	.....	.....	2	.....	.....	.....	2
Roscommon	100	Totals.....	.....	2,588	1.28	33	33	.....	.....	.....
		Males.....	51.52	1,313	.94	17	17	.....	.....	.....
		Females.....	48.48	775	2.06	16	16	.....	.....	.....
Saginaw	118	Totals.....	.....	74,795	2.88	2,156	2,152	.....	2	2
		Males.....	54.20	41,588	2.81	1,168	1,166	.....	1	1
		Females.....	45.80	33,207	2.97	987	985	.....	1	1
		Unknown.....	.....	.....	.....	1	1	.....	.....	.....
Sanilac	100	Totals.....	.....	29,588	2.43	719	719	.....	.....	.....
		Males.....	50.07	15,573	2.31	360	360	.....	.....	.....
		Females.....	49.98	14,005	2.56	359	359	.....	.....	.....
Schoolcraft.....	124	Totals.....	.....	3,313	3.08	102	102	.....	.....	.....
		Males.....	55.45	2,210	2.53	56	56	.....	.....	.....
		Females.....	44.55	1,103	4.08	45	45	.....	.....	.....
		Unknown.....	.....	.....	.....	1	1	.....	.....	.....
Shiawassee.....	122	Totals.....	.....	23,073	1.31	369	367	.....	2	.....
		Males.....	55.01	14,731	1.38	203	203	.....	.....	.....
		Females.....	44.99	13,347	1.24	166	164	.....	2	.....

TABLE 6.—CONTINUED.—*Births by Counties, by Sex, and by Color.*

Counties.	Births—Males to 100 females.	Sex.	Per cent of births of each sex to total of both sexes.	Population in 1884 represented by births in 1888.	Per cent of births of each sex to population of same sex.	Color.—Children born in 1888.					
						Total of all colors.	White.	Black.	Mulatto.	Indian.	Unknown.
St. Clair.....	113	Totals.....	-----	46,783	2.24	1,050	1,049	-----	1	-----	-----
		Males.....	53.05	24,058	2.32	557	556	-----	1	-----	-----
		Females.....	46.95	22,723	2.17	493	493	-----	-----	-----	-----
		Unknown.....	-----	2	-----	-----	-----	-----	-----	-----	-----
St. Joseph.....	134	Totals.....	-----	26,277	1.67	438	435	2	1	-----	-----
		Males.....	57.31	13,295	1.89	251	249	2	-----	-----	-----
		Females.....	42.69	12,982	1.44	187	186	-----	1	-----	-----
Tuscola.....	90	Totals.....	-----	30,726	1.97	605	603	-----	-----	2	-----
		Males.....	47.44	16,126	1.78	287	287	-----	-----	-----	-----
		Females.....	52.56	14,600	2.18	318	316	-----	-----	2	-----
Van Buren.....	113	Totals.....	-----	30,341	1.77	538	530	5	3	-----	-----
		Males.....	52.97	15,377	1.85	285	280	2	3	-----	-----
		Females.....	47.03	14,964	1.69	253	250	3	-----	-----	-----
Washtenaw.....	113	Totals.....	-----	41,694	1.81	547	544	3	-----	-----	-----
		Males.....	53.02	21,067	1.38	290	289	1	-----	-----	-----
		Females.....	46.98	20,627	1.25	257	255	2	-----	-----	-----
Wayne.....	109	Totals.....	-----	188,966	7.43	14,046	13,841	153	48	-----	4
		Males.....	52.17	94,492	7.71	7,325	7,225	70	30	-----	-----
		Females.....	47.83	94,474	7.11	6,715	6,614	83	18	-----	-----
		Unknown.....	-----	-----	-----	6	2	-----	-----	-----	4
Wexford.....	115	Totals.....	-----	10,099	2.53	256	256	-----	-----	-----	-----
		Males.....	53.52	5,473	2.50	137	137	-----	-----	-----	-----
		Females.....	46.48	4,626	2.57	119	119	-----	-----	-----	-----

PARENT-NATIVITY.

In Table 7 are presented the statistics relative to the parentage of children born in Michigan during the year 1888. It will be seen that the number of children born of native-born parents was 44.01 per cent of the whole number, while the per cent of births of purely foreign parentage was 36.34 per cent of the whole number. The number born of mixed parentage was 8,108, or 16.56 per cent of the whole number. As compared with the percentages given in 1887, there is an increase of one per cent among the native, and nearly a corresponding decrease among the foreign. There is also a decrease of nearly one per cent among those born of mixed parentage.

The average per cent of children born of native-born parents [for the eighteen years, 1870-1887, was 44.61, which is about the same as that for the year 1888. The average per cent of children born of foreign-born parents for the same period of years was 34.83, which is 1.51 per cent less than that for the year 1888. The average per cent of those

born of mixed parentage for the eighteen years was 16.32, which does not differ materially from that for the year 1888.

When a comparison is made between native and foreign parents, it should be borne in mind that the term "Native" is less definite than the term "Foreign," as the former class includes all who were born in the United States, and therefore comprises a large number whose parents were foreign-born.

TABLE 7.—*Showing, by sex, the Parent-nativity of Children born in Michigan during the year 1888, according to the returns.*

Nativity of Parents of Children Born, 1888.	Total births, 1888.							
	Number.				Per cent of total.			
	Totals.	Males.	Females.	Unknown.	Totals.	Males.	Females.	Unknown.
All nativities.....	48,952	25,526	23,401	25	100.00	100.00	100.00	100.00
Both parents native-born.....	21,542	11,168	10,365	9	44.01	43.75	44.29	36.00
Both parents foreign-born.....	17,791	9,327	8,456	8	36.34	36.54	36.14	32.00
Foreign father and native mother.....	5,136	2,695	2,440	1	10.49	10.56	10.48	4.00
Foreign mother and native father.....	2,972	1,567	1,403	2	6.07	6.14	5.99	8.00
Unknown mother, father native.....	129	53	75	1	.26	.20	.32	4.00
Unknown mother, father foreign.....	74	48	26	-----	.15	.19	.11	-----
Unknown father, mother native.....	198	82	116	-----	.41	.32	.50	-----
Unknown father, mother foreign.....	98	43	50	-----	.19	.17	.21	-----
Both unknown.....	1,017	543	470	4	2.08	2.13	2.01	16.00
One or both native.....	29,977	15,565	14,399	13	61.23	60.98	61.53	52.00
One or both foreign.....	26,066	13,680	12,375	11	53.25	53.59	52.88	44.00

Table 8 shows the parent-nativity of children born in Michigan for each of the years 1886-1888, and the average for ten years 1878-1887. The excess of children born of native-born parents over those of foreign parentage in 1888 was 3,751, which was greater by 947 than the excess of the same class in 1887. Comparing the percentages of native and foreign-born parents for the year 1888 with those for the average of ten years it is seen that the proportion of children of native-born parents is less than the average, while the proportion of children of foreign-born parents is greater than the average. In both classes of mixed parentage the percentage for 1888 is less than that for the average of ten years.

According to the State census of 1884, there were, between the ages of 15 and 45 years, 597,714, or 67.25 per cent of the population native-born, and 291,016, or 32.75 per cent foreign-born.

This shows that the proportion of births among the native-born parents is less than the proportion of native-born inhabitants, while the reverse is true in regard to the foreign-born parents.

In Table 9 may be seen the parent-nativity of children born in Michigan during the year 1888, not only for the entire State but also for each county. The number of births, the nativity of whose parents was returned as unknown was 1,017, of which number 24 were from Ionia; 33 from Kent; 21 from Marquette; 36 from Saginaw; 45 from St. Clair; 28 from Washtenaw, and 551 from Wayne.

TABLE 8.—*Parent-nativity of Children born in Michigan for each of the years 1886-1888, and the Average for Ten Years, 1878-1887.*

Nativity of Parents of Children Born.	1886.		1887.		1888.		Average for 10 Years, 1878-1887.		
	Number.	Per cent of total.	Number.	Per cent of total.	Number.	Per cent of total.	Number.	Per cent of total.	
All nativities.....	41,095	100.00	46,226	100.00	48,952	100.00	88,704	100.00	
Both native-born	17,614	42.86	19,881	43.01	21,542	44.01	17,104	44.19	
Both foreign-born	15,327	37.30	17,077	36.94	17,791	36.34	18,746	35.52	
Foreign father and native mother	4,463	10.86	5,058	10.94	5,136	10.49	4,381	11.82	
Foreign mother and native father	2,587	6.17	3,001	6.49	2,972	6.07	2,377	6.14	
One or both unknown	1,154	2.81	1,209	2.62	1,511	3.09	1,096	2.83	
One or both parents native *	24,614	59.90	27,940	60.44	29,650	60.56	28,895	61.74	
One or both parents foreign *	22,327	54.33	25,136	54.38	25,899	52.91	20,519	53.01	
Father {	Native	20,309	49.12	23,039	49.84	24,643	50.34	19,635	50.73
	Foreign	19,876	48.37	22,220	48.07	23,001	46.99	18,215	47.06
	Unknown	910	2.21	967	2.09	1,308	2.67	854	2.21
Mother {	Native	22,287	54.19	25,157	54.42	26,876	54.91	21,681	56.02
	Foreign	17,939	43.65	20,174	43.64	20,856	42.60	16,210	41.88
	Unknown	889	2.16	895	1.94	1,220	2.49	813	2.10

*Excluding cases where nativity of either parent is unknown.

TABLE 9.—*Exhibiting, for the State and Counties of Michigan, by Sex, the Parent-nativity of Children Returned for the Year 1888. (Still-births included.)*

State and Counties.	Sex.	Children born, 1888.	Nativity of Parents of Children Born,—1888.								
			Both native-born.	Both foreign-born.	Foreign father and native mother.	Foreign mother and native father.	Mother Unknown.		Father Unknown.		Both unknown.
							Father.		Mother.		
							Native.	Foreign.	Native.	Foreign.	
State.....	Totals.....	48,952	21,542	17,791	5,136	2,972	129	74	198	93	1017
	Males.....	25,526	11,168	9,327	2,695	1,567	53	48	82	43	543
	Females.....	23,401	10,365	8,456	2,440	1,403	75	26	116	50	470
	Unknown.....	25	9	8	1	2	1				4
Alcona.....	Totals.....	62	6	28	10	2					16
	Males.....	37	3	18	4						12
	Females.....	25	3	10	6	2					4
Alger.....	Totals.....	23	2	13	4					1	3
	Males.....	10	1	4	2						3
	Females.....	13	1	9	2					1	
Allegan.....	Totals.....	767	484	139	83	35	4	3	7	1	11
	Males.....	389	235	77	46	22		2	1	1	5
	Females.....	378	249	62	37	13	4	1	6		6
Alpena.....	Totals.....	409	44	276	51	35		1	1		1
	Males.....	226	20	157	28	19		1			1
	Females.....	183	24	119	23	16			1		
Antrim.....	Totals.....	202	89	68	28	16			1		
	Males.....	115	54	36	14	11					
	Females.....	87	35	32	14	5			1		
Arenac.....	Totals.....	127	37	57	19	10			1		3
	Males.....	63	21	21	13	6					2
	Females.....	64	16	36	6	4			1		1
Baraga.....	Totals.....	74	15	32	5	4			1		17
	Males.....	36	10	14	3	2					7
	Females.....	38	5	18	2	2			1		10
Barry.....	Totals.....	362	315	13	26	7			1		
	Males.....	192	170	5	14	3					
	Females.....	170	145	8	12	4			1		

TABLE 9.—CONTINUED.—*Births by Counties, Parent-nativity, and Sex.*

Counties.	Sex.	Children born, 1888.	Nativity of Parents of Children Born,—1888.								Both unknown.
			Both native-born.	Both foreign-born.	Foreign father and native mother.	Foreign mother and native father.	Mother Unknown.		Father Unknown.		
							Father.		Mother.		
							Native.	Foreign.	Native.	Foreign.	
Bay	Totals.....	1,491	335	860	174	113	-----	1	4	1	3
	Males.....	788	162	475	85	61	-----	-----	2	1	2
	Females.....	703	173	385	89	52	-----	1	2	-----	1
Benzie	Totals.....	102	48	32	12	8	-----	-----	1	1	-----
	Males.....	63	30	19	9	5	-----	-----	-----	-----	-----
	Females.....	39	18	13	3	3	-----	-----	1	1	-----
Berrien	Totals.....	610	409	105	52	33	3	1	3	1	3
	Males.....	322	221	59	18	16	2	1	2	-----	3
	Females.....	288	188	46	34	17	1	-----	1	1	-----
Branch	Totals.....	351	300	22	16	8	1	-----	1	1	2
	Males.....	176	150	13	10	1	-----	-----	-----	1	1
	Females.....	175	150	9	6	7	1	-----	1	-----	1
Calhoun	Totals.....	651	476	60	60	39	5	2	3	1	5
	Males.....	334	239	36	31	22	1	1	1	1	2
	Females.....	317	237	24	29	17	4	1	2	-----	3
Cass	Totals.....	338	294	12	13	11	-----	-----	5	-----	3
	Males.....	190	162	9	5	7	-----	-----	4	-----	3
	Females.....	148	132	3	8	4	-----	-----	1	-----	-----
Charlevoix	Totals.....	143	62	41	20	13	-----	-----	-----	-----	2
	Males.....	72	38	18	7	8	-----	-----	-----	-----	1
	Females.....	71	24	23	13	10	-----	-----	-----	-----	1
Cheboygan	Totals.....	317	77	157	52	24	-----	1	1	2	3
	Males.....	159	34	81	25	15	-----	-----	1	1	2
	Females.....	158	43	76	27	9	-----	1	-----	1	1
Chippewa	Totals.....	178	37	110	18	8	1	-----	1	2	1
	Males.....	92	22	55	9	5	1	-----	-----	-----	-----
	Females.....	86	15	55	9	3	-----	-----	1	2	1
Clare	Totals.....	153	72	37	25	13	-----	-----	2	-----	4
	Males.....	68	30	19	11	6	-----	-----	-----	-----	2
	Females.....	85	42	18	14	7	-----	-----	2	-----	2
Clinton	Totals.....	458	327	46	53	19	-----	-----	4	-----	9
	Males.....	220	153	22	26	10	-----	-----	3	-----	6
	Females.....	238	174	24	27	9	-----	-----	1	-----	3

TABLE 9.—CONTINUED.—*Births by Counties, Parent-nativity, and Sex.*

Counties.	Sex.	Children born, 1888.	Nativity of Parents of Children Born,—1888.							
			Both native-born.	Both foreign-born.	Foreign father and native mother.	Foreign mother and native father.	Mother Unknown.		Father Unknown.	
							Father.		Mother.	
							Native.	Foreign.	Native.	Foreign.
Crawford	Totals.....	16	10	2	3	1				
	Males.....	9	7	1	1					
	Females.....	7	3	1	2	1				
Delta	Totals.....	378	76	218	59	19	3	1		2
	Males.....	200	43	110	31	12	2	1		1
	Females.....	178	33	108	28	7	1			1
Eaton	Totals.....	468	405	11	25	10	14		3	
	Males.....	225	198	6	12	5	4			
	Females.....	242	207	5	13	5	9		3	
	Unknown.....	1					1			
Emmet	Totals.....	121	71	32	9	3			3	3
	Males.....	64	38	18	4	2				2
	Females.....	57	33	14	5	1			3	1
Genesee	Totals.....	541	356	57	61	64			1	2
	Males.....	265	169	36	27	31			1	1
	Females.....	275	187	21	34	32				1
	Unknown.....	1				1				
Gladwin	Totals.....	53	17	16	11	8				1
	Males.....	30	8	11	7	3				1
	Females.....	23	9	5	4	5				
Gogebic	Totals.....	251	34	158	24	9	2	8	2	13
	Males.....	146	21	93	13	4	1	3	1	10
	Females.....	105	13	65	11	5	1	5	1	3
Grand Traverse	Totals.....	247	133	64	24	19			1	2
	Males.....	134	73	28	18	12				1
	Females.....	113	60	36	6	7			1	1
Gratiot	Totals.....	473	360	25	62	20	1			5
	Males.....	240	181	14	27	14	1			3
	Females.....	231	178	10	35	6				2
	Unknown.....	2	1	1						
Hillsdale	Totals.....	338	301	9	16	8		1	1	2
	Males.....	169	149	4	9	6		1		
	Females.....	169	152	5	7	2			1	2

TABLE 9.—CONTINUED.—*Births by Counties, Parent-nativity, and Sex.*

Counties.	Sex.	Children born, 1888.	Nativity of Parents of Children Born,—1888.								
			Both native-born.	Both foreign-born.	Foreign father and native mother.	Foreign mother and native father.	Mother Unknown.		Father Unknown.		Both unknown.
							Father.		Mother.		
							Native.	Foreign.	Native.	Foreign.	
Houghton	Totals	1,022	140	719	107	31		3			22
	Males	554	84	387	49	17		3			14
	Females	468	56	332	58	14					8
Huron	Totals	671	108	413	93	53			1	2	1
	Males	345	50	218	52	23			1	1	
	Females	326	58	195	41	30				1	1
Ingham	Totals	491	335	70	35	34	7	2	1	2	5
	Males	245	169	33	21	14	1	2	1	2	2
	Females	246	166	37	14	20	6				3
Ionia	Totals	440	305	44	41	23	1		2		24
	Males	221	151	22	23	13	1		1		10
	Females	219	154	22	18	10			1		14
Iosco	Totals	300	40	198	30	31			1		
	Males	151	21	97	17	15			1		
	Females	149	19	101	13	16					
Iron	Totals	97	13	63	9	1			1		10
	Males	43	5	32	4						2
	Females	54	8	31	5	1			1		8
Isabella	Totals	432	227	106	53	38			2		6
	Males	224	120	49	25	24			1		5
	Females	208	107	57	28	14			1		1
Jackson	Totals	579	379	102	47	29	5		11	1	5
	Males	308	208	49	21	16	3		7	1	3
	Females	271	171	53	26	13	2		4		2
Kalamazoo	Totals	679	407	174	50	37	1	1	3		6
	Males	342	211	85	27	15	1		1		2
	Females	337	196	89	23	22		1	2		4
Kalkaska	Totals	102	63	15	11	13					
	Males	44	23	8	6	7					
	Females	58	40	7	5	6					
Kent	Totals	2,079	836	845	205	131	9	4	15	1	33
	Males	1,083	443	423	113	71	5	3	5	1	19
	Females	996	393	422	92	60	4	1	10		14

TABLE 9.—CONTINUED.—*Births by Counties, Parent-nativity and Sex.*

Counties.	Sex.	Children born, 1888.	Nativity of Parents of Children Born,—1888.								
			Both native-born.	Both foreign-born.	Foreign father and native mother.	Foreign mother and native father.	Mother Unknown.		Father Unknown.		Both unknown.
							Father.		Mother.		
							Native.	Foreign.	Native.	Foreign.	
Keweenaw	Totals	118	13	79	23	1		1	1		
	Males	73	10	48	12	1		1	1		
	Females	45	3	31	11						
Lake	Totals	90	39	28	9	12		1		1	
	Males	35	14	10	4	5		*1		1	
	Females	55	25	18	5	7					
Lapeer	Totals	481	224	120	79	53	1		1		3
	Males	261	115	64	45	35	1		1		
	Females	217	108	56	33	17					3
	Unknown	3	1		1	1					
Leelanaw	Totals	232	80	93	37	13	1		4	2	2
	Males	114	45	43	19	4				2	1
	Females	118	35	50	18	9	1		4		1
Lenawee	Totals	632	480	70	49	22	1	1	2		7
	Males	320	249	33	22	12					4
	Females	312	231	37	27	10	1	1	2		3
Livingston	Totals	304	233	27	24	19			1		
	Males	151	112	17	10	11			1		
	Females	153	121	10	14	8					
Luce	Totals	19	5	13	1						
	Males	10	4	5	1						
	Females	9	1	8							
Mackinac	Totals	120	46	41	19	5	1		2		6
	Males	67	25	23	7	4	1		2		5
	Females	52	21	17	12	1					1
	Unknown	1		1							
Macomb	Totals	687	346	175	85	76			3	2	
	Males	352	174	91	49	35			2	1	
	Females	335	172	84	36	41			1	1	
Manistee	Totals	696	121	477	57	33	2		1		5
	Males	395	64	277	31	17	1		1		4
	Females	301	57	200	26	16	1				1
Manitou	Totals	10	6	2	1	1					
	Males	5	3	2							
	Females	5	3		1	1					

TABLE 9.—CONTINUED.—*Births by Counties, Parent-nativity, and Sex.*

Counties.	Sex.	Children born, 1888.	Nativity of Parents of Children Born,—1888.							
			Both native-born.	Both foreign-born.	Foreign father and native mother.	Foreign mother and native father.	Mother Unknown.		Father Unknown.	
							Father.		Mother.	
							Native.	Foreign.	Native.	Foreign.
Marquette	Totals	1,049	100	844	55	29				21
	Males	544	52	437	27	17				11
	Females	505	48	407	28	12				10
Mason	Totals	334	120	142	36	25		3	1	3
	Males	169	59	77	17	10		3	1	2
	Females	165	61	65	19	15				2
Mecosta	Totals	375	197	99	39	38	1		1	
	Males	177	90	49	17	20			1	
	Females	198	107	50	22	18	1			
Menominee	Totals	841	137	568	81	32	1	1	4	17
	Males	437	76	297	40	15		1		8
	Females	404	61	271	41	17	1		4	9
Midland	Totals	260	113	81	29	33	1		3	
	Males	151	67	42	19	19	1		3	
	Females	109	46	39	10	14				
Missaukee	Totals	86	19	49	13	3			1	1
	Males	49	14	27	7				1	
	Females	37	5	22	6	3				1
Monroe	Totals	670	490	55	76	36	3	1	3	5
	Males	341	255	24	37	20	1	1		3
	Females	327	235	29	39	16	2		3	2
	Unknown	2		2						
Montcalm	Totals	598	349	122	68	42	4	1	5	5
	Males	315	181	53	45	25	3	1	3	3
	Females	283	168	69	23	17	1		2	2
Montmorency	Totals	26	4	14	6	2				
	Males	12	1	9	1	1				
	Females	14	3	5	5	1				
Muskegon	Totals	1,139	314	629	121	63	2	2	2	3
	Males	617	164	352	65	31		1	1	2
	Females	521	150	277	56	32	2	1	1	1
	Unknown	1								1
Newaygo	Totals	329	202	69	31	13	1		4	9
	Males	161	91	36	19	8			2	5
	Females	168	111	33	12	5	1		2	4

TABLE 9.—CONTINUED.—*Births by Counties, Parent-nativity and Sex.*

Counties.	Sex.	Children born, 1888.	Nativity of Parents of Children Born,—1888.								
			Both native-born.	Both foreign-born.	Foreign father and native mother.	Foreign mother and native father.	Mother Unknown.		Father Unknown.		Both unknown.
							Father.		Mother.		
							Native.	Foreign.	Native.	Foreign.	
Sanilac	Totals	719	116	376	161	56		2	1	4	3
	Males	360	63	182	81	28		1	1	2	2
	Females	359	53	194	80	28		1		2	1
Schoolcraft	Totals	102	27	54	14	5					2
	Males	56	15	31	6	3					1
	Females	45	11	23	8	2					1
	Unknown	1	1								
Shiawassee	Totals	369	228	68	41	22	3	1	2	1	3
	Males	203	124	35	26	10	2	1	1	1	3
	Females	166	104	33	15	12	1		1		
St. Clair	Totals	1,050	387	311	158	121	11	11	5	1	45
	Males	557	212	149	98	57	6	5	2	1	27
	Females	493	175	162	60	64	5	6	3		18
St. Joseph	Totals	438	326	56	25	19	2		5		5
	Males	251	184	33	17	11	1		3		2
	Females	187	142	23	8	8	1		2		3
Tuscola	Totals	605	285	130	92	79	5		2	2	10
	Males	287	133	64	53	31	2				4
	Females	318	152	66	39	48	3		2	2	6
Van Buren	Totals	538	459	21	30	20	1		5		2
	Males	285	241	14	18	10			1		1
	Females	253	218	7	12	10	1		4		1
Washtenaw	Totals	547	297	113	77	29			2	1	28
	Males	290	153	67	42	15			1	1	11
	Females	257	144	46	35	14			1		17
Wayne	Totals	14,046	5,733	5,656	1,277	744	6	4	32	43	551
	Males	7,325	2,993	2,960	654	407	2	2	9	15	283
	Females	6,715	2,738	2,692	623	337	4	2	23	28	268
	Unknown	6	2	4							
Wexford	Totals	256	126	88	23	15	1	1			2
	Males	137	62	54	11	8					2
	Females	119	64	34	12	7	1	1			

TWIN CHILDREN, 1888.

According to the returns in 1888, there were 1,194 children born of 592 mothers. Of this number 1,166 were twins; twenty-four were triplets, and four were reported as quadruplets. There were more twin children returned for the year 1888 than for any previous year in the history of registration, corresponding in this respect to the increased number of births. In 197 cases of the 583 pairs of twins both children were males; in 163 cases both were females; and in 223 cases there was one child of each sex, making 617 males and 549 females. The proportion of males to females was 112 males to each 100 females, which was a smaller proportion than was returned in 1887, but larger than that for all children born. The average proportion of males for the ten years, 1878-1887, was 101 males to 100 females, which is also a smaller proportion of males than is found among all children born.

Table 10 shows, by months, the number of pairs of twin and the number of twin children for the year 1888. The month of April stands at the head of the list with the largest number of twin births, and the month of September at the foot with the smallest number.

TABLE 10.—*Exhibiting, by Sex, the Number of Pairs of Twins and Twin Children Returned for the Year 1888.*

Year and Months, 1888.		No. of Twin Children, 1888.				No. of Pairs of Twins, 1888.				
		Totals.	Males.	Females.	Males to 100 females.	Totals.	Males.	Females.	One of each sex.	Males to 100 females.
Year 1888		1,166	a 617	b 549	112	583	197	163	223	121
More than the Average No. of Twins.	April	134	81	53	152	67	25	11	31	227
	December	120	64	56	114	60	23	19	18	127
	May	110	55	55	100	55	18	18	19	100
	July	106	57	49	116	53	21	17	15	140
	February	104	53	51	104	52	13	12	27	108
Average		98	51	47	109	49	16	14	19	114
Less than the Average No. of Twins.	June	96	47	49	95	48	13	14	21	98
	October	92	35	57	61	46	10	21	15	67
	March	90	55	35	157	45	18	8	19	225
	November	90	50	40	125	45	16	11	18	145
	August	82	46	36	127	41	15	10	16	150
	January	80	41	39	105	40	15	14	11	136
	September	62	33	29	113	31	10	8	13	125

a Includes 46 still-born, 1 black, 2 mulatto, and 2 indian.

b Includes 81 still-born, 1 black, 6 indian, and 2 illegitimate.

The facts concerning the nativity of the parents of twins will be found in Table 11. The most noteworthy feature of the table is the increased proportion of twins whose parents were foreign-born, the percentage for 1888 being larger than for any year of the previous ten, and 6.33 per cent larger than the average for ten years. Comparing the evidence in this table with that given in Table 7, it will be observed that the proportion of twins born of foreign parents was greater than that for all children born, while the reverse is true in regard to the native-born. All of this tends to show that there is a larger twin birth-rate among the foreign-born parents than among the native, and as the statistics of former years also bear the same testimony, it seems to be quite conclusive.

TABLE 11.—*Parent-nativity of Twins Returned in Michigan for 1888.*

Nativity of Parents of Twins, 1888.	Pairs of Twins, 1888.							
	Number.				Per Ct. of each Parent-Nativity to Total of all Nativities.			
	Totals.	Males.	Females.	One of each.	Totals.	Males.	Females.	One of each.
All nativities.....	588	197	163	228	100.00	100.00	100.00	100.00
Both native-born.....	238	79	68	91	40.83	40.10	41.72	40.81
Both foreign-born.....	257	87	73	97	44.08	44.16	44.79	43.50
Foreign father and native mother.....	48	21	12	15	8.23	10.66	7.36	6.72
Foreign mother and native father.....	30	10	8	12	5.15	5.08	4.91	5.38
Unknown mother, father native.....				1				
Unknown mother, father foreign.....	1			1	.17			.45
Unknown father, mother foreign.....	1		1		.17		.61	
Both unknown.....	8		1	7	1.37		.61	3.14
One or both native.....	316	110	88	118	54.20	55.84	53.99	53.36
One or both foreign.....	337	118	94	125	57.80	59.90	57.67	56.05

Table 12 shows the proportion of twin births, by nativity and color of mothers, for each of the years 1886, 1887, 1888, and the average for the ten years 1878-1887. According to the facts here presented the largest proportion of twins was among the foreign-born mothers, being greater than that for the mothers of all nativities. This is true, not only for the year 1888, but also for the ten-year average. As regards the color of mothers of twins the black and mulatto have the largest proportion for each year and the average except the year 1888. This table bears out the evidence given in table 11 concerning the nativity of mothers of twins.

TABLE 12.—*By Nativity and Color of Mothers, the Number and Proportion of Twin Births returned for the Years 1886-1888, and the Average for Ten Years, 1878-1887.*

Nativity and Color of Mothers of Twins, 1886-1888.	1886.			1887.			1888.			Average for 10 Years, 1878-1887.		
	Number of pairs of twins.	Whole No. of mothers including those of twins.	Per cent of births of twins to all mothers.	Number of pairs of twins.	Whole No. of mothers including those of twins.	Per cent of births of twins to all mothers.	Number of pairs of twins.	Whole No. of mothers including those of twins.	Per cent of births of twins to all mothers.	Number of pairs of twins.	Whole No. of mothers including those of twins.	Per cent of births of twins to all mothers.
Mothers of all colors and all nativities.....	501	40,582	1.23	523	45,688	1.16	583	48,350	1.20	442	38,251	1.16
All native-born mothers.....	272	21,989	1.24	271	24,880	1.09	286	26,582	1.07	239	21,437	1.11
All foreign-born mothers.....	221	17,712	1.24	245	19,925	1.23	288	20,557	1.40	194	16,010	1.21
Mothers of unknown nativities.....	8	881	.91	12	883	1.36	9	1,211	.74	9	804	1.12
White.....	494	40,262	1.23	513	45,127	1.10	577	47,867	1.20	434	37,851	1.15
Black.....	1	86	1.16	10	254	3.94	1	234	.43	3	134	2.24
Mulatto.....	5	108	4.63	1	67	1.49	1	106	.94	3	92	2.26
Indian.....	1	112	.89	3	113	2.65	4	126	3.17	2	125	1.60
Unknown.....		14		1	127	.79		17			49	
Black and mulatto.....	6	194	3.09	11	321	3.43	2	340	.58	6	226	2.65

Table 13 presents certain facts concerning the births of triplet children in 1888. There were eight such cases and one case of quadruplets. The set of quadruplets was returned from Allegan county and is the second time in the history of registration that more than three children were born at a single birth. The other case was in the year 1880 and from Huron county. As regards the sex of those in table 13, there were seventeen males and eleven females. It also appears from the table that the foreign-born parents outnumbered the native, there being six foreign fathers to three native fathers, and five foreign mothers to four native mothers.

VITAL STATISTICS OF MICHIGAN, 1888.

TABLE 13.—*Exhibiting certain details concerning Triplet Children returned for the year 1888.*

Counties.	Triplet children, 1888.					Parents of triplets, 1888.		
	Month of birth, 1888.	Color.	Sex.			Birthplace of father.	Birthplace of mother.	Occupation of father.
			Males.	Females.	Unknown.			
Allegan.....	June....	White	a 3	1		Austria.....	Austria.....	Farmer.
Clare.....	Jan.....	White	b 2	1		Canada.....	Canada.....	Jeweler.
Gratiot.....	Feb.....	White	3			Pennsylvania..	Pennsylvania..	Farmer.
Gratiot.....	Feb.....	White	c 1	2		New York.....	New York.....	Farmer.
Manistee.....	July.....	White	d 3			Canada.....	Canada.....	Teamster.
Muskegon.....	June.....	White	2	1		Finland.....	Finland.....	Laborer.
Wayne.....	Jan.....	White	e 2	1		Canada.....	Michigan.....	Sailor.
Wayne.....	March..	White		3		Michigan.....	Michigan.....	Saloonist.
Wayne.....	Oct.....	White	1	2		Ontario.....	Ireland.....	Butcher.

a Reported quadruplets.

b One female still-born.

c One male and two females still-born.

d Three males still-born.

e One male and one female still-born.

TABLE 14.—*Exhibiting the Number of Pairs of Twins and Cases of Triplets returned in Michigan for the 14 Years, 1875-1888, and the average for these years.*

Years.	Pairs of Twins.	Cases of Triplets.	No. of Births to one Pair of Twins.	No. of Births to one Case of Triplets.
1875.....	370	1	86	31,958
1876.....	428	8	80	4,279
1877.....	367		91	33,895
1878.....	427	3	82	11,721
1879.....	402	2	85	17,061
1880.....	358	5	99	7,065
1881.....	372	5	93	6,950
1882.....	430	9	86	4,114
1883.....	466	9	88	4,534
1884.....	450	4	90	10,102
1885.....	481	7	88	6,017
1886.....	501	6	82	6,849
1887.....	528	5	88	9,245
1888.....	588	8	84	6,119
Average.....	440	5	87	11,396

In table 14 may be seen the number of pairs of twins and sets of triplets returned for each of the years 1875-1888, also the average for these years. It appears from the facts here presented that the proportion of twin births to single births does not vary materially in the course of a series of years, there being about 87 single births to each pair of twins.

Table 15 shows the statistics of plural births during the past fourteen years, classified with reference to the nativity of the parents. The percentage of those born of native parentage was less than that for any year since 1885, and also less than that of the average for fourteen years. The percentage of those born of foreign parents was greater than that of any previous year of the table, and was 5.99 per cent greater than the average.

TABLE 15.—*Exhibiting the Parent-nativity of Plural Births returned in Michigan for the Fourteen Years, 1875-1888.*

Years.	Totals.	Native-born.		Foreign-born.		Mixed.		Unknown.	
		Numbers.	Per cent.	Numbers.	Per cent.	Numbers.	Per cent.	Numbers.	Per cent.
1875.....	748	271	36.47	318	42.80	124	16.69	30	4.04
1876.....	880	391	44.43	322	36.59	148	16.25	24	2.73
1877.....	784	394	45.51	252	34.83	122	16.62	26	3.54
1878.....	868	402	46.58	291	33.72	142	16.45	28	3.25
1879.....	810	374	46.17	236	29.14	188	23.21	12	1.48
1880.....	781	341	46.65	276	37.75	104	14.23	10	1.37
1881.....	759	355	46.77	270	35.57	124	16.34	10	1.32
1882.....	887	350	39.46	358	40.36	158	17.25	26	2.93
1883.....	959	417	43.48	364	37.96	150	15.64	28	2.92
1884.....	912	360	39.47	396	43.42	144	15.79	12	1.32
1885.....	988	384	39.06	414	42.12	155	15.77	30	3.05
1886.....	1,020	419	41.08	407	39.90	176	17.26	18	1.76
1887.....	1,071	448	41.83	423	39.49	168	15.69	32	2.99
1888.....	1,194	485	40.62	580	44.39	159	13.32	20	1.67
Average.....	925	381	42.68	347	38.40	147	16.47	22	2.45

STILL-BIRTHS, 1888.

The number of still-births reported for the year 1888 was 1,358, which was the largest number ever returned for a single year. It was 461 more than was reported in 1887; 449 more than in 1886; 350 more than in 1885, and 520 more than for the ten-year average. Table 16 shows the proportion of still-births to all births and the proportion of the mothers of still-born children to all mothers for the years 1885-1888, and the average for ten years, 1878-1887. It will be noticed that the per cents for the average were not as great as those for the year 1888.

TABLE 16.—*The relation of Still-births to all Births and the relation of Mothers of Still-born Children to all Mothers returned for the years 1885–1888, and the Average for ten years, 1878–1887.*

Children and Mothers.	Total births and Still-births.				
	1885.	1886.	1887.	1888.	Av. for 10 Years, 1878–1887.
All children born.....	42,119	41,095	46,226	48,952	38,704
Still-born children.....	1,008	909	897	1,358	888
Per cent of still-born to total.....	2.39	2.21	1.94	2.77	2.17
All mothers.....	41,624	40,582	45,688	48,350	38,251
Mothers of still-born children.....	978	880	869	1,322	815
Per cent of mothers of still-born children to all mothers.....	2.35	2.17	1.90	2.73	2.13

The facts concerning the nativity and color of the mothers of still-born children may be learned in Table 17. The percentage of native-born mothers is again the lowest, not only for each year of the table, but also for the ten-year average. The black and mulatto mothers continue to have the highest per cent, while the indian mothers have the lowest.

TABLE 17.—*By Nativity and Color, the Number and Proportion of Mothers having Still-births, for the Years 1886–1888, and the average for Ten Years, 1878–1887.*

Nativity and Color of Mothers.	1886.			1887.			1888.			Average for 10 years, 1878–1887.		
	Mothers having still-births.	Whole No. of mothers, including those of still-births.	Per cent of mothers of still-births to all mothers.	Mothers having still-births.	Whole No. of mothers, including those of still-births.	Per cent of mothers of still-births to all mothers.	Mothers having still-births.	Whole No. of mothers, including those of still-births.	Per cent of mothers of still-births to all mothers.	Mothers having still-births.	Whole No. of mothers, including those of still-births.	Per cent of mothers of still-births to all mothers.
Mothers of all colors and all nativities.....	880	40,582	2.17	869	45,688	1.90	1,322	48,350	2.73	815	38,251	2.13
All native-born mothers.....	395	21,989	1.80	408	24,880	1.64	604	26,582	2.27	379	21,437	1.77
All foreign-born mothers.....	340	17,712	1.92	367	19,925	1.84	539	20,557	2.62	324	16,010	2.02
Mothers of unknown nativities.....	145	881	16.46	94	883	10.65	179	1,211	14.78	112	804	13.93
White.....	861	40,262	2.14	849	45,127	1.88	1,288	47,867	2.69	794	37,851	2.10
Black.....	4	86	4.65	12	254	4.72	17	334	7.26	7	134	5.22
Mulatto.....	5	108	4.63		67		6	106	5.66	3	92	3.26
Indian.....		112		4	113	3.54	3	126	2.38	1	125	.80
Unknown.....	10	14	71.43	4	127	3.15	8	17	47.06	10	49	20.40
Black and mulatto.....	9	194	4.64	12	321	3.74	23	340	6.76	10	226	4.42

In Table 18 is presented the nativity of both parents of still-born children for the year 1888. It is seen that thirty-eight per cent of these births fell to native-born parents; thirty-four per cent were the offspring of foreign-born parents, and thirteen per cent occurred to parents, one of whom was a foreign-born, while the other was native-born.

TABLE 18.—*Parent-nativity of Still-born Children returned for the year 1888.*

Nativity of Parents of Still-born Children, 1888.	Still-born Children,—1888.							
	Number.				Per cent of each Parent-nativity to Total of all Nativities.			
	Totals.	Males.	Females.	Unknown.	Totals.	Males.	Females.	Unknown.
All nativities	1,358	809	534	15	100.00	100.00	100.00	100.00
Both native-born	516	322	190	4	38.00	39.80	35.58	26.67
Both foreign-born	467	280	183	4	34.39	34.61	34.27	26.67
Foreign father and native mother	96	54	41	1	7.07	6.68	7.68	6.67
Foreign mother and native father	83	51	30	2	6.11	6.30	5.62	13.33
Unknown mother, father native	3	-----	2	1	.22	-----	.37	6.66
Unknown mother, father foreign	5	4	1	-----	.37	.50	.19	-----
Unknown father, mother native	8	1	7	-----	.59	.12	1.31	-----
Unknown father, mother foreign	6	3	3	-----	.44	.37	.56	-----
Both unknown	174	94	77	3	12.81	11.62	14.42	20.00
One or both native	706	423	270	8	51.99	52.90	50.56	53.33
One or both foreign	657	392	258	7	48.38	48.45	48.31	46.67

TABLE 19.—*Exhibiting by Sex, the Parent-nativity, and by Sex and Months, the Number of Still-births returned in Michigan, for the Year 1888.*

Sex of Still-births, 1888.	Year, 1888.	Months, 1888.												Nativity of Parents of Still-births,—1888.									
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.	Native.	Foreign.	Foreign father and native mother.	Foreign mother and native father.	Mother Unknown.		Father, Unknown.		Both unknown.
Totals	a 1,358	108	93	104	100	120	112	121	112	99	108	119	157	5	516	467	96	68	3	5	8	6	174
Males	b 800	55	55	63	52	76	65	77	70	67	59	67	101	2	322	290	54	51	4	4	1	3	94
Females	c 534	50	35	41	46	43	47	43	42	31	49	51	55	1	190	183	41	30	2	1	7	3	77
Unknown	d 15	3	3		2	1		1		1		1	1	2	4	4	1	2	1				3

a Includes 12 pairs and 6 half-pairs male twins; 7 pairs and 2 half-pairs female twins; 12 pairs and 4 half-pairs male and 3 half-pairs female twins of one of each sex.

b Includes 762 white, 11 black, 5 mulatto, 1 indian, and 10 illegitimate.

c Includes 624 white, 6 black, 1 mulatto, 3 indian, and 9 illegitimate.

d Includes 7 white and 8 color unknown.

The returns of births for the year 1888 again exemplify the universal rule of an excess of males among children born alive and among the still-born children. It is also the usual observation that among illegitimate births those of females outnumber those of males. The ratio among still-births for 1888 was 151 males to 100 females, being greater than that for the ten-year average. Among illegitimates there were 98 males to 100 females, and for the ten-year average the sexes were equal.

TABLE 20.—*Exhibiting the Proportion of Males to Females among Children born alive, Still-births and Illegitimates.*

	1887.	1888.	Average for 10 Years, 1878-1887.
Born alive.....	23,523	24,717	19,588
	21,771	22,867	18,250
	35	10	23
Males to 100 females.....	108	108	107
Still-born.....	508	809	475
	359	584	325
	35	15	39
Males to 100 females.....	140	151	146
Illegitimate.....	196	293	153
	224	296	153
	2		2
Males to 100 females.....	88	96	100

ILLEGITIMATE CHILDREN, 1888.

The number of illegitimate births, of which there was any record in 1888, was 591, which is the largest number returned for any year since the beginning of registration. The increase in the number in the last four years is noteworthy, and indicated that the record of these cases is more complete than formerly. In 1888, these births represent a ratio of 12.07 to each one thousand of the whole number of births in the State. Of the whole number reported, Wayne county, or the city of Detroit, contributed 407, more than two-thirds, and the ratio of illegimates to the total births in the county was 28.99 to one thousand.

The statistics presented in Table 22 show the nativity and color of mothers of illegitimate children for the years 1886, 1887, 1888, and the average for ten years, 1878-1887. The proportion of native-born mothers was lower in 1888, than the ten-year average and also lower than in 1887 or 1886. As regards color, the largest proportion of mothers of illegitimates to all mothers appears for the black and indian, and the smallest for the white.

From the showing in Table 25, it would be natural to conclude that the native-born women of Michigan were more immoral than the foreign-born. But upon a closer examination of the facts presented, a different conclusion is reached. Making a comparison of rates based upon the data of the population in the two classes, it is found that there were 291,906 native-born females in Michigan between the ages of 15 and 45 to 125,373 foreign-born females. Calculating the birth-rates to 10,000 mothers of each class, there were, in 1888, 5.10 for the native-born to 5.74 for the foreign-born. When

the fact is taken into consideration that nearly all the indians and those of African descent are included among the native-born, among whom the illegitimate birth-rate is shown in Table 26 to be greater than among other races, the showing becomes more favorable for the native-born whites.

The very large proportion among mothers of unknown nativities and unknown color, shows how incomplete are the records of these births.

TABLE 21.—*The Relation of Illegitimate Children to all Children born for the years 1885-1888, and the Average for 10 years, 1878-1887.*

Children and mothers.	Total Births and Illegimates.				
	1885.	1886.	1887.	1888.	Average for 10 Years, 1878-1887.
All children born.....	42,119	41,095	46,226	48,962	38,704
Illegitimate children.....	248	300	422	591	306
Per cent of illegimates to total.....	.59	.73	.91	1.20	.79
All mothers.....	41,624	40,582	45,688	48,350	38,251
Mothers of illegitimate children.....	247	297	418	590	305
Per cent of mothers of illegimates to all mothers.....	.59	.73	.91	1.22	.79

TABLE 22.—*By Nativity and Color, the Number and Proportion of Mothers of Illegimates returned for the years 1886-1888, and the average for ten years, 1878-1887.*

Nativity and color of mothers.	1886.			1887.			1888.			Average for 10 years, 1878-1887.		
	Mothers having illegitimates.	Whole number of mothers, including those of illegimates.	Per cent of mothers of illegimates to all mothers.	Mothers having illegitimates.	Whole number of mothers, including those of illegimates.	Per cent of mothers of illegimates to all mothers.	Mothers having illegitimates.	Whole number of mothers, including those of illegimates.	Per cent of mothers of illegimates to all mothers.	Mothers having illegitimates.	Whole number of mothers, including those of illegimates.	Per cent of mothers of illegimates to all mothers.
Mothers of all colors and all nativities.....	297	40,582	.73	418	45,688	.91	590	48,350	1.22	305	38,251	.79
All native-born mothers.....	140	21,969	.64	150	24,880	.60	149	26,582	.56	137	21,437	.63
All foreign-born mothers.....	45	17,712	.25	70	19,925	.35	71	20,557	.34	72	16,010	.44
Mothers of unknown nativities.....	112	881	12.71	198	883	22.42	370	1,211	30.55	96	804	11.94
White.....	279	40,262	.69	319	45,127	.71	571	47,867	1.19	280	37,851	.73
Black.....	3	86	3.49	10	254	3.93	12	234	5.12	6	134	4.47
Mulatto.....	6	108	5.56	7	67	10.45	2	106	1.88	4	92	4.34
Indian.....	7	112	6.25	8	113	7.08	5	126	3.96	7	125	5.60
Unknown.....	2	14	14.29	74	127	58.27	—	17	—	8	49	16.32
Black and mulatto.....	9	194	4.64	17	321	5.30	14	340	4.11	10	226	4.42

TABLE 23.—*Exhibiting, by Sex, the Number by Months, and the Nativity of Parents of Illegitimates returned for the Year 1888.*

Sex of Illegitimates, 1888.	Year, 1888.	Months, 1888.												Nativity of Mothers of Illegitimates, 1888.						Nativity of Fathers of Illegitimates, 1888.						
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Native.	Foreign.			Native.	Foreign.			Totals.	Foreign.			
		Totals.	Born in Michigan.	Born in other states.	Totals.	Born in Canada.	Born in other coun- tries.	Unknown.	Totals.	Born in Michigan.	Born in other states.	Totals.	Born in Canada.		Born in other coun- tries.	Unknown.	Totals.		Born in Michigan.	Born in other states.	Totals.		Born in Canada.	Born in other coun- tries.	Unknown.	
Totals.	591	46	62	55	58	51	57	57	52	40	47	35	30	1	149	117	32	72	21	51	370	46	40	6	17	528
Males.	293	18	32	20	29	25	28	24	28	24	29	18	18	.....	73	60	13	31	10	21	189	29	27	2	10	254
Females.	298	28	30	35	29	26	29	33	24	16	18	17	12	1	76	57	19	41	11	30	181	17	13	4	7	274

TABLE 24.—*Exhibiting the Number and Ratio of Illegitimate Births Returned in Fourteen years, 1875-1888.*

Years.	Children Born out of Wedlock.		Years.	Children Born out of Wedlock.	
	Number.	To Every 1,000 Births.		Number.	To Every 1,000 Births.
1875.....	198	6.04	1882.....	301	8.13
1876.....	266	7.77	1883.....	311	7.62
1877.....	316	9.46	1884.....	198	4.78
1878.....	202	5.74	1885.....	248	5.89
1879.....	292	8.56	1886.....	300	7.50
1880.....	425	12.08	1887.....	422	9.13
1881.....	382	10.99	1888.....	591	12.07
Average 14 years.....				317	8.25

TABLE 25.—*Showing the Nativity of Mothers of Illegitimates returned for the Fourteen Years, 1875-1888.*

Years.	Totals.	Native.		Foreign.		Unknown.	
		Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
1875.....	198	96	49.74	32	16.58	65	38.68
1876.....	266	173	65.04	53	19.92	40	15.04
1877.....	316	161	50.95	80	25.32	75	23.73
1878.....	202	114	56.44	34	16.83	54	26.73
1879.....	292	137	46.92	90	30.82	65	22.26
1880.....	425	148	34.82	73	17.18	204	48.00
1881.....	382	187	48.95	98	25.65	97	25.40
1882.....	301	145	48.17	77	25.58	79	26.25
1883.....	311	137	44.05	86	27.65	88	28.30
1884.....	198	103	53.37	69	35.75	21	10.88
1885.....	248	115	46.37	86	34.68	47	18.95
1886.....	300	142	47.33	45	15.00	113	37.67
1887.....	422	151	35.78	72	17.06	199	47.16
1888.....	591	149	25.21	72	12.18	370	62.61
Average.....	317	140	46.60	69	22.87	108	30.48

TABLE 26.—*Exhibiting, by Sex and Color, the Population of 1884, the Number of Illegitimates returned for the year 1888, and the Per Cent of such Children to Inhabitants.*

Color or Race.	Sex.	Population June 1, 1884, represented by births in 1888.	Total illegitimate births in 1888.	Per cent of births to population.	Per cent of each sex to total of both sexes.	Number of inhab- itants to one illegiti- mate child of the same color.
All colors.....	Totals.....	a 1,847,234	591	.03		3,126
	Males.....	970,609	298	.03	49.58	3,312
	Females.....	876,419	298	.03	50.42	2,941
	Unknown.....	206				
White.....	Totals.....	1,824,196	572	.03		3,189
	Males.....	958,639	279	.03	48.78	3,436
	Females.....	865,547	293	.03	51.22	2,954
	Unknown.....	10				
Black.....	Totals.....	6,855	12	.18		571
	Males.....	3,691	9	.24	75.00	410
	Females.....	3,164	3	.09	25.00	1,055
Mulatto.....	Totals.....	8,257	2	.02		4,129
	Males.....	4,301	2	.05	100.00	2,101
	Females.....	4,056				
Indian.....	Totals.....	6,815	5	.07		1,363
	Males.....	3,531	3	.08	60.00	1,177
	Females.....	3,284	2	.06	40.00	1,642
Unknown.....	Totals.....	1,041				
	Males.....	477				
	Females.....	368				
	Unknown.....	196				
Black and mulatto.....	Totals.....	15,112	14	.09		1,079
	Males.....	7,892	11	.14	78.57	717
	Females.....	7,220	3	.04	21.43	2,407

a Includes 70 Asiatic males.

TABLE 27.—*Exhibiting by Counties, the number of Pairs of Twins, and the number of Illegitimate and Still-born Children returned for the year 1888.*

State and counties.	Number of pairs of twins born in 1888.	Number of illegitimate children born in 1888.	Number of still-births in 1888.	Counties.	Number of pairs of twins born in 1888.	Number of illegitimate children born in 1888.	Number of still-births in 1888.
State	583	591	1,358	Ingham	6	1	18
				Ionia	3	2	6
Alcona			3	Iosco	5	1	5
Alger	1	1		Iron	2	2	1
Allegan	15	6	19	Isabella	4	2	7
Alpena	8		6	Jackson	7	3	13
Antrim	2	2	1	Kalamazoo	6	2	15
Arenac	3	1		Kalkaska	2		4
Baraga	3	1	2	Kent	23	11	37
Barry	5	1	5	Keweenaw	2	3	5
Bay	13	3	31	Lake	1	1	
Benzie	1	1	5	Lapeer	8		10
Berrien	3	4	14	Leelanaw	3	6	7
Branch	4	2	11	Lenawee	12	4	11
Calhoun	13	3	16	Livingston	5	1	9
Cass	5	4	4	Luce			
Charlevoix	1		3	Mackinac	4	2	4
Cheboygan	2	2	2	Macomb	8	6	15
Chippewa	4			Manistee	10		25
Clare	1		8	Manitou			
Clinton	3	9	17	Marquette	8		27
Crawford				Mason	9		8
Delta	2		8	Mecosta	1	2	3
Eaton	15	1	16	Menominee	5	4	33
Emmet		2	1	Midland	4	3	2
Genesee	9	2	9	Missaukee	1		3
Gladwin	1			Monroe	3	6	16
Gogebic	5		8	Montcalm	4	9	20
Grand Traverse	2	1	5	Montmorency	1		1
Gratiot	4	1	12	Muskegon	15	1	38
Hillsdale	5	1	8	Newaygo	1	3	8
Houghton	16	1	25	Oakland	4	1	10
Huron	6	3	15				

TABLE 27.—CONTINUED.—*Births, 1888.*

Counties.	Number of pairs of twins born in 1888.	Number of illegitimate children born in 1888.	Number of still-births in 1888.	Counties.	Number of pairs of twins born in 1888.	Number of illegitimate children born in 1888.	Number of still-births in 1888.
Oceana.....	5	1	4	Sanilac.....	14	5	16
Ogemaw.....				Schoolcraft.....	2		5
Ontonagon.....		1	6	Shiawassee.....	4		5
Osceola.....	6	2	3	St. Clair.....	7	12	26
Oscoda.....				St. Joseph.....	10	7	6
Otsego.....	2			Tuscola.....	18	5	9
Ottawa.....	17	5	31	Van Buren.....	5	6	18
Presque Isle.....			4	Washtenaw.....	5	1	14
Roscommon.....			1	Wayne.....	184	407	511
Saginaw.....	34	10	76	Wexford.....	6	1	8

Table 28 gives the names of the townships in Michigan in which it was reported there were no births in 1888. Four of these townships were organized since the census of 1884 and the remaining ones represent a population of 3,491.

Table 29 shows the townships, and the counties in which they are located, from which no returns of births were received for the year 1888. As usual the supervisors failed to make the proper returns to the county clerk.

TABLE 28.—*Townships in which it was reported there were no births in 1888.*

Counties.	Townships.—No Births in 1888.	Population in 1884.		
		Totals.	Males.	Females.
Totals		3,491	2,076	1,415
Arenac	Turner *			
Crawford	{ Frederic	355	240	115
	{ South Branch	200	110	90
Emmet	Egleston	114	57	57
Gogebic	Marenisco *			
Iosco	Thompson	42	26	16
Keweenaw	Clifton	182	96	86
Lake	{ Center	79	46	33
	{ Eden	71	46	25
Mason	Branch	476	296	180
Missaukee	{ Aetna	123	76	47
	{ Forest	141	74	67
Ogemaw	{ Goodar *			
	{ Hill	30	20	10
	{ Logan *			
Oscoda	Greenwood	83	39	44
Otsego	{ Charlton	208	169	39
	{ Corwith	613	338	275
Roscommon	Denton	183	119	64
Saginaw	{ Marion	172	94	78
	{ Spaulding	419	230	189

* Organized since census was taken.

BIRTHS, TOWNSHIPS MAKING NO RETURNS.

61

TABLE 23.—Exhibiting the Counties and Townships from which no returns of Births were received in 1888.

Counties.	Townships from which no Returns of Births were received for 1888.*	Population, June 1, 1884.			White.			Black and Mulatto.			Indian.			Unknown.			Native.			Foreign.			Unknown.		
		Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.
Totals.....		6,424	3,315	2,609	6,284	3,737	2,547	11	11	—	85	43	42	44	24	20	4,199	2,336	1,863	2,196	1,460	736	29	19	10
Chippewa.....	{ Detour.....	615	384	231	565	353	212	8	8	—	1	—	1	41	23	18	199	123	76	414	260	154	2	1	1
	{ Drummond ..	400	241	159	311	195	116	2	2	—	84	43	41	3	1	2	188	106	82	211	135	76	1	—	1
Kalkaska.....	Springfield...	417	241	176	417	241	176	—	—	—	—	—	—	—	—	—	311	169	142	106	72	34	—	—	—
Lake.....	{ Lake.....	291	200	91	291	200	91	—	—	—	—	—	—	—	—	—	147	84	63	144	116	28	—	—	—
	{ Yates.....	354	208	146	353	207	146	1	1	—	—	—	—	—	—	—	246	139	107	97	59	38	11	10	1
Marquette.....	Richmond.....	370	205	165	370	205	165	—	—	—	—	—	—	—	—	—	176	86	90	194	119	75	—	—	—
Mecosta.....	Mecosta.....	796	428	368	796	428	368	—	—	—	—	—	—	—	—	—	605	327	278	187	100	87	4	1	3
Missaukee.....	Riverside.....	238	133	105	238	133	105	—	—	—	—	—	—	—	—	—	96	53	43	142	80	62	—	—	—
	{ Beaver.....	300	177	123	300	177	123	—	—	—	—	—	—	—	—	—	261	151	110	39	26	13	—	—	—
Newaygo.....	{ Brooks.....	1,055	590	465	1,055	590	465	—	—	—	—	—	—	—	—	—	864	470	394	182	114	68	9	6	3
	{ Atherton.....	220	115	105	220	115	105	—	—	—	—	—	—	—	—	—	196	104	92	24	11	13	—	—	—
Oscoda.....	{ Big Creek.....	143	82	61	143	82	61	—	—	—	—	—	—	—	—	—	117	65	52	26	17	9	—	—	—
	{ Comins.....	149	123	21	149	123	21	—	—	—	—	—	—	—	—	—	72	56	16	77	72	5	—	—	—
	{ Harmon.....	124	66	58	124	66	58	—	—	—	—	—	—	—	—	—	96	44	52	28	22	6	—	—	—
Schoolcraft.....	Thompson.....	533	358	175	533	358	175	—	—	—	—	—	—	—	—	—	300	175	125	232	183	49	1	—	1
	{ Liberty.....	206	114	92	206	114	92	—	—	—	—	—	—	—	—	—	173	92	81	33	22	11	—	—	—
Wexford.....	{ Springville...	213	145	68	213	145	68	—	—	—	—	—	—	—	—	—	152	92	60	60	52	8	1	1	—

* The townships of Mikado, Alcona county, and Trout Lake and Whitefish, Chippewa county, and Harrison, Schoolcraft county, were organized since census was taken.

MARRIAGES, 1888.

The number of marriages whose statistics were recorded in Michigan in 1888 was 17,233. In 1887 the number as first compiled was 17,050, as seen in Table 31, but 122 more marriages were returned for that year with those for 1888. This shows that the marriage law is still violated to some extent although there is a great improvement over the old law, when the additional returns for a previous year would sometimes amount to five or six hundred.

The marriage rate in 1888, the number of marriages to every thousand of the population as given by the last census, was 9.30, or 18.60 persons married. There was, according to the returns, one marriage solemnized to every 107 persons of the living population.

Michigan compares very favorably in its marriage rate with some of the New England States, having a system of registration, as may be seen by the following:

Vermont.....	17.16
Massachusetts (1888).....	19.3
Rhode Island (1887).....	18.00
Connecticut.....	14.88
New Hampshire (1887).....	20.1

The average number of marriages for each of certain specified periods of time, during the year 1888, was as follows:

Total number of marriages.....	17,233
Average number per quarter.....	4,308
Average number per month.....	1,436
Average number per week.....	331
Average number per day.....	47

In Table 30 is presented the proportion of the marriages in the different quarters of the year. The table gives a summary statement for each of the years 1885-1888, and the average for ten years 1878-1887. The general rule in Michigan in reference to the order of the four quarters of the year has been, fourth, third, second, first, but in 1888 this order is reversed in regard to the second and third, although there is very little difference between the two. The fourth quarter has by far the largest number for each year and the ten-year average. In Massachusetts, the order of the quarters is fourth, second, third, first, and the same characteristic is shown in the English registration tables. In table 30 the number of marriages for each year is corrected for additional returns up to April 13, 1889.

TABLE 30.—*Marriages by Quarters of the year for each of the years 1885-1888, and the Average for ten years, 1878-1887. Corrected for Additional Returns up to April 13, 1889.*

Totals and Months with which Quarters end.	1885.		1886.		1887.		1888.		Average for 10 years, 1878-1887.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Totals	15,885	100.00	16,658	100.00	17,172	100.00	17,233	100.00	15,775	100.00
March	3,378	21.27	3,576	21.47	3,566	20.76	3,701	21.47	3,467	21.98
June	3,698	23.25	3,722	22.34	3,987	23.22	4,067	23.60	3,529	22.37
September	3,771	23.74	4,116	24.71	4,561	26.56	4,049	23.50	3,827	24.26
December	5,042	31.74	5,237	31.44	5,053	29.48	5,409	31.39	4,946	31.35
Unknown	1	.....	7	.04	5	.08	7	.04	6	.04
Average ^a	3,971	25.00	4,165	25.00	4,298	25.00	4,308	25.00	3,944	25.00

^a Including marriages in unknown quarter of the year.

Table 31 differs from Table 30 in that the former shows the number and proportion of marriages for each of the years 1885-1887, as first returned, tabulated and published, without the corrections for additional returns. A comparison of the two tables will show the number of delinquent marriages which has been added to the number as first returned for each of the above years.

TABLE 31.—*Marriages by Quarters of the year for each of the years 1885-1888, and the Average for Ten Years, 1878-1887, as originally returned and published in reports.*

Totals and Months with which Quarters end.	1885.		1886.		1887.		1888.		Average for 10 years, 1878-1887.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Totals	15,016	100.00	16,631	100.00	17,050	100.00	17,233	100.00	15,074	100.00
March	3,260	21.71	3,572	21.48	3,563	20.90	3,701	21.48	3,387	22.47
June	3,555	23.67	3,718	22.36	3,979	23.34	4,067	23.60	3,484	22.78
September	3,596	23.95	4,111	24.72	4,549	26.68	4,049	23.49	3,688	24.47
December	4,604	30.66	5,223	31.40	4,954	29.05	5,409	31.39	4,560	30.25
Unknown	1	.01	7	.04	5	.08	7	.04	5	.08
Average ^a	3,754	25.00	4,158	25.00	4,268	25.00	4,308	25.00	3,769	25.00

^a The number in unknown quarter of year included.

With the exception of the year 1887, the month of November returned the largest number of marriages for each year and the average in Table 32. The months of October, November and December seem to be the season most favorable for weddings in Michigan. As in previous years and the average, the month of February holds the lowest place with regard to the number of marriages recorded in any single month in 1888.

TABLE 32.—*Marriages by Months, greatest first, for the years 1886-1888, and the Average for ten years 1878-1887, corrected for Additional Returns up to April 13, 1889.*

Order.	1886.			1887.			1888.			Average for 10 Years, 1878-1887.		
	Months.	Numb'r.	Per Cent of Total.	Months.	Numb'r.	Per Cent of Total.	Months.	Numb'r.	Per Cent of Total.	Months.	Numb'r.	Per Cent of Total.
	Total..	16,658	100.00	Total....	17,172	100.00	Total....	17,283	100.00	Total..	15,775	100.00
1	Nov...	1,777	10.67	Sept....	1,798	10.44	Nov.....	1,824	10.58	Nov...	1,675	10.62
2	Dec....	1,736	10.42	Nov.....	1,775	10.34	Oct.....	1,819	10.56	Oct....	1,689	10.99
3	Oct....	1,724	10.35	Dec.....	1,724	10.04	Dec.....	1,766	10.25	Dec....	1,632	10.35
4	Sept....	1,597	9.59	Oct.....	1,554	9.05	Sept....	1,579	9.16	Sept....	1,452	9.20
5	Mar....	1,353	8.12	Aug.....	1,426	8.30	Apr.....	1,511	8.77	July...	1,247	7.90
6	July...	1,346	8.08	May.....	1,347	7.84	May.....	1,313	7.62	Apr....	1,221	7.74
7	May...	1,305	7.84	July.....	1,342	7.82	Jan.....	1,290	7.43	Jan....	1,210	7.67
8	June...	1,247	7.49	Apr.....	1,321	7.69	July.....	1,253	7.27	May...	1,190	7.54
9	Jan....	1,193	7.16	June....	1,319	7.68	June....	1,243	7.21	Mar....	1,188	7.53
10	Aug....	1,173	7.04	Mar.....	1,287	7.50	Mar.....	1,217	7.06	Aug....	1,128	7.15
11	Apr....	1,170	7.02	Jan.....	1,192	6.94	Aug.....	1,217	7.06	June...	1,118	7.09
12	Feb....	1,090	6.18	Feb.....	1,087	6.33	Feb.....	1,204	6.99	Feb....	1,089	6.78
	Unk....	7	.04	Unk....	5	.03	Unk....	7	.04	Unk....	6	.04
	Av. a...	1,388	8.33	Av. a...	1,431	8.33	Av. a...	1,436	8.33	Av. a...	1,315	8.33

* Includes those for unknown month.

Table 33 gives the number of marriages by months, for the year 1888, as returned from each county in the State.

TABLE 33.—*Distinguishing by Counties and by Months, the number of Marriages returned for the year 1888.*

State and Counties.	Year, 1888.	Months, 1888.												
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
State	17,233	1,280	1,204	1,217	1,511	1,313	1,243	1,253	1,217	1,579	1,819	1,824	1,766	7
Alcona	25	3	1	1	2	1	4	4	2	2	1	2	2	
Alger	9	2	1			1	1		1	2		1		
Allegan	319	28	25	20	26	24	24	10	17	33	28	43	41	
Alpena	137	15	6	7	15	12	4	13	9	10	24	17	5	
Antrim	78	3	7	10	5	3	5	3	7	7	7	10	11	
Arenac	32		2	3	9	1	3	2	2	3	1	3	3	
Baraga	28	2		1	2	1	3	3	1	4	2	5	4	
Barry	206	17	14	19	8	16	7	13	17	18	15	20	42	
Bay	447	45	26	18	42	45	29	38	43	40	41	48	32	
Benzie	25		3	1	3	5	2	3	3	2			3	
Berrien	376	29	29	32	27	25	23	33	32	33	36	43	34	
Branch	242	24	23	21	21	15	15	9	19	21	28	21	25	
Calhoun	323	14	23	32	18	27	20	18	19	31	51	33	37	
Cass	172	9	13	18	8	13	13	14	13	17	16	19	19	
Charlevoix	88	9	4	2	7	1	10	8	11	11	8	11	6	
Cheboygan	93	7	5	8	13	5	6	13	9	7	11	6	3	
Chippewa	106	9	7	7	7	9	7	8	8	11	10	16	7	
Clare	68	3	3	5	4	9	4	9	4	5	3	7	12	
Clinton	229	14	14	22	19	16	9	13	13	15	32	39	23	
Crawford	30	2		3		2	3	4	2	5	3	3	3	
Delta	149	16	8	11	10	10	11	10	14	10	12	21	16	
Eaton	266	23	16	24	13	14	10	16	26	37	25	28	34	
Emmet	72	6	2	1	6	4	8	10	7	8	6	7	7	
Genesee	326	22	26	27	28	19	20	25	11	25	50	28	45	
Gladwin	18		1	2		1	3	2		1	1	4	3	
Gogebic	121	10	4	13	17	11	14	6	5	10	12	13	6	
Grand Traverse	120	7	6	5	12	10	8	14	9	13	14	9	13	
Gratiot	238	16	12	18	15	17	13	27	22	33	32	14	19	
Hillsdale	283	23	25	21	17	14	20	14	19	25	29	37	39	
Houghton	331	21	20	18	27	19	33	24	33	45	29	31	31	

TABLE 33.—CONTINUED.—*Marriages by Counties, by Months.*

Counties.	Year, 1888.	Months, 1888.												
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
Huron.....	169	13	12	11	10	16	9	15	9	10	18	25	21	....
Ingham.....	334	14	27	30	26	25	17	28	22	27	42	40	36	....
Ionia.....	272	13	17	27	19	19	10	28	13	30	28	29	39	....
Iosco.....	123	9	7	6	13	11	7	12	11	6	13	14	14	....
Iron.....	36	3	.....	2	8	7	2	4	3	1	1	3	2	....
Isabella.....	146	12	9	11	11	9	10	12	12	13	10	12	25	....
Jackson.....	337	25	21	33	27	20	18	24	20	35	39	38	37	....
Kalamazoo.....	374	35	21	26	17	35	26	23	23	39	45	50	34	....
Kalkaska.....	52	4	3	2	3	3	1	6	1	4	9	6	10	....
Kent.....	1,048	66	64	59	82	95	99	73	74	100	122	103	111	....
Keweenaw.....	14	2	1	1	.....	2	3	2	.....	.....	1	2	.....	....
Lake.....	69	5	5	5	8	8	3	8	4	9	2	8	4	....
Lapeer.....	247	19	17	16	23	12	13	26	15	26	34	23	23	....
Leelanaw.....	58	3	2	2	7	2	2	3	5	8	14	1	9	....
Lenawee.....	349	16	26	30	25	25	25	20	21	44	37	42	38	....
Livingston.....	167	13	17	17	22	8	15	7	12	9	11	18	18	....
Luce.....	26	2	.....	.....	6	1	.....	.....	3	8	1	2	3	....
Mackinac.....	64	2	5	2	7	5	9	8	4	4	7	6	5	....
Macomb.....	251	19	27	16	29	19	17	12	8	21	24	35	24	....
Manistee.....	222	21	23	10	26	16	20	19	12	17	20	22	16	....
Manitou *	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....
Marquette.....	345	23	21	17	23	20	23	39	33	33	39	38	25	1
Mason.....	127	7	8	4	6	7	7	10	12	15	13	23	15	....
Mecosta.....	190	15	15	11	18	14	14	13	14	10	17	19	30	....
Menominee.....	243	19	15	20	32	15	13	25	26	18	28	15	17	....
Midland.....	76	7	6	8	6	4	3	7	3	2	10	6	14	....
Missaukee.....	38	5	2	5	9	2	3	2	5	2	1	1	1	....
Monroe.....	300	29	23	13	33	29	15	20	14	22	27	51	24	....
Montcalm.....	264	17	18	18	34	17	16	15	23	23	21	34	28	....
Montmorency.....	16	1	1	2	2	1	1	4	.....	1	1	.....	2	....
Muskegon.....	427	27	29	27	50	24	40	24	29	39	53	34	51	....
Newaygo.....	168	11	16	11	19	9	13	17	10	12	17	15	18	....
Oakland.....	320	13	32	36	25	19	19	21	19	21	33	26	46	....
Oceana.....	135	8	4	11	10	11	8	12	16	16	12	14	13	....
Ogemaw.....	52	2	5	13	4	1	1	2	3	8	6	5	2	....

* No returns from county clerk.

TABLE 33.—CONTINUED.—*Marriages by Counties, by Months.*

Counties.	Year, 1888.	Months, 1888.												Unknown.
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Ontonagon.....	18	1	2	-----	2	-----	1	-----	1	2	3	1	-----	
Osceola.....	128	6	12	10	12	9	14	11	11	12	8	9	14	----
Oscoda.....	18	2	-----	1	3	1	1	-----	2	2	-----	5	1	----
Otsego.....	44	-----	6	2	2	4	4	7	3	4	7	1	4	----
Ottawa.....	229	18	11	15	27	18	19	13	20	20	29	17	22	----
Presque Isle.....	32	8	4	2	5	-----	-----	1	3	4	1	8	1	----
Roscommon.....	17	2	-----	-----	4	-----	-----	1	1	-----	3	-----	6	----
Saginaw.....	685	55	40	31	50	77	48	41	46	59	60	57	65	6
Sanilac.....	224	16	12	14	20	21	17	24	10	26	21	18	25	----
Schoolcraft.....	53	1	2	-----	4	6	5	9	4	5	7	3	7	----
Shiawassee.....	276	16	15	37	25	19	18	17	20	22	30	27	30	----
St. Clair.....	445	37	35	23	47	32	34	26	19	32	52	64	44	----
St. Joseph.....	201	21	22	19	14	9	15	8	12	18	15	19	29	----
Tuscola.....	233	11	18	28	24	14	14	17	17	22	27	26	15	----
Van Buren.....	274	24	16	33	24	14	12	20	20	14	30	30	37	----
Washtenaw.....	312	15	25	26	27	24	30	14	16	27	30	38	40	----
Wayne.....	1,967	177	153	91	185	193	190	126	145	182	194	193	133	----
Wexford.....	116	11	6	13	10	11	7	11	10	6	14	9	8	----

COLOR OF PERSONS MARRIED.

Table 34 shows the marriage-rate in 1888 among the different races in Michigan. There are no great changes in the rates from those of 1887, there being a slight increase among the white and a dropping off among the black, mulatto, and indian races. As these marriage-rates are computed from the population of Michigan in 1884 with the marriages in 1888, due allowance should be made for the increase in population.

From the foot-notes of Table 35 may be seen the number of mixed marriages which occurred during the year 1888. Five white females married males of another color, one to a black groom, two to mulattoes, and two to indians. Ten white males have been returned as having married brides of another color, nine to indians and one to a black bride.

TABLE 34.—*Exhibiting, by Color and Sex, the Number of Marriages and the Per Cent of Persons Married in 1888 to Population in 1884.*

Color, 1888.	Sex.	Population June 1, 1884, represented by marriages in 1888.	Number of Marriages, 1888.	Persons Married, 1888.		Per cent of Persons Married in 1888 to Pop- ulation June 1, 1884, by Sex and Color.	Number of Persons who Mar- ried those of Another Color.
				Number.	Per cent of Totals.		
All colors.....	Totals.....	1,852,460	17,233	34,466	100.00	1.86	60
	Males.....	973,877		17,233	50.00	1.77	30
	Females.....	878,572		17,233	50.00	1.96	30
	Unknown.....	11					
White.....	Totals.....	1,829,565	17,054	34,103	98.95	1.86	15
	Males.....	961,875		17,054	49.48	1.77	10
	Females.....	867,680		17,049	49.47	1.96	5
	Unknown.....	10					
Black.....	Totals.....	6,856	94	180	.52	2.62	16
	Males.....	3,692		94	.27	2.54	12
	Females.....	3,164		86	.25	2.72	4
Mulatto.....	Totals.....	8,267	42	89	.26	1.07	17
	Males.....	4,211		42	.12	.90	6
	Females.....	4,056		47	.14	1.16	11
Indian.....	Totals.....	6,812	42	92	.27	1.35	12
	Males.....	3,528		42	.12	1.19	2
	Females.....	3,284		50	.15	1.52	10
One or both unknown.....	Totals.....	890	1	2		.22	
	Males.....	501		1		.20	
	Females.....	388		1		.25	
	Unknown.....	1					
Black and mulatto.....	Totals.....	15,123	136	269	.78	1.77	33
	Males.....	7,903		136	.39	1.72	18
	Females.....	7,220		133	.39	1.84	15

TABLE 35.—*Exhibiting for the State and Counties, the Number of Marriages returned for the year 1888, and the Color of Persons Married in 1888, stated by Couples.*

State and Counties.	Marriages, 1888.	Color of Persons Married, 1888, stated by Couples.							
		White.	Black.	Mulatto.	Indian.	Female unk., male white.	Male unk., female white.	Both unk.	
State	17,238	a 17,054	b 94	c 42	d 42				1
Alcona	25	25							
Alger	9	e 9							
Allegan	319	318	1						
Alpena	137	137							
Antrim	78	77			1				
Arenac	32	32							
Baraga	28	f 22			g 6				
Barry	206	206							
Bay	447	443	3		1				
Benzie	25	24	h 1						
Berrien	376	371	5						
Branch	242	242							
Calhoun	323	319	i 2	j k 2					
Cass	172	160	12						
Charlevoix	88	86			2				
Cheboygan	93	l 93							
Chippewa	106	m 97			9				
Clare	68	68							
Clinton	229	229							
Crawford	30	30							
Delta	149	146		n 2	1				
Eaton	266	265	1						
Emmet	72	o 71			1				
Genesee	326	323		p 3					

a 9 couples, male white, female indian; 1 couple, male white, female black.

b 11 couples, male black, female mulatto; 1 couple, male black, female white.

c 3 couples, male mulatto, female black; 1 couple, male mulatto, female indian; 2 couples, male mulatto, female white.

d 2 couples, male indian, female white.

e 1 couple, male white, female indian.

f 2 couples, male white, female indian.

g 1 couple, male indian, female white.

h 1 couple, male black, female mulatto.

i 1 couple, male black, female mulatto.

j 1 couple, male mulatto, female black.

k 1 couple, male mulatto, female indian.

l 1 couple, male white, female indian.

m 1 couple, male white, female indian.

n 1 couple, male mulatto, female white.

o 1 couple, male white, female indian.

p 1 couple, male mulatto, female white.

VITAL STATISTICS OF MICHIGAN, 1888.

TABLE 35.—CONTINUED.—*Marriages in 1888, by Counties, by Color.*

Counties.	Marriages, 1888.	Color of Persons Married, 1888, stated by Couples.						
		White.	Black.	Mulatto.	Indian.	Female unk., male white.	Male unk., female white.	Both unk.
Gladwin.....	18	18						
Gogebic.....	121	121						
Grand Traverse.....	120	119			1			
Gratiot.....	238	238						
Hillsdale.....	283	282	1					
Houghton.....	331	331						
Huron.....	169	169						
Ingham.....	334	328	q 4	r 2				
Ionia.....	272	272						
Iosco.....	123	123						
Iron.....	36	36						
Isabella.....	146	139			7			
Jackson.....	337	329	6	2				
Kalamazoo.....	374	365	s 4	5				
Kalkaska.....	52	52						
Kent.....	1,048	1,041	t 3	4				
Keweenaw.....	14	14						
Lake.....	69	69						
Lapeer.....	247	246	1					
Leelanaw.....	58	58						
Lenawee.....	349	344	3	2				
Livingston.....	167	167						
Luce.....	26	26						
Mackinac.....	64	u 58			v 6			
Macomb.....	251	251						
Manistee.....	222	222						
Manitou*.....								
Marquette.....	345	345						
Mason.....	127	126			1			
Mecosta.....	190	189	1					
Menominee.....	243	241			2			
Midland.....	76	75			1			
Missaukee.....	38	38						
Monroe.....	300	299	w 1					

q 2 couples, male black, female mulatto.

r 1 couple, male mulatto, female black.

s 1 couple, male black, female mulatto.

t 3 couples, male black, female mulatto.

u 3 couples, male white, female indian.

v 1 couple, male indian, female white.

w 1 couple, male black, female white.

*No returns from county clerk.

MARRIAGES, BY COUNTIES, BY COLOR.

71

TABLE 35.—CONTINUED.—*Marriages in 1888, by Counties, by Color.*

Counties.	Marriages, 1888.	Color of Persons Married, 1888, stated by Couples.						
		White.	Black.	Mulatto.	Indian.	Female unk. male white.	Male unk. female white.	Both unk.
Montcalm.....	264	262		1	1			
Montmorency.....	16	16						
Muskegon.....	427	426			1			
Newaygo.....	168	168						
Oakland.....	320	319		1				
Oceana.....	135	134			1			
Ogemaw.....	52	52						
Ontonagon.....	13	13						
Osceola.....	128	128						
Oscoda.....	18	18						
Otsego.....	44	44						
Ottawa.....	229	228	1					
Presque Isle.....	32	32						
Roscommon.....	17	17						
Saginaw.....	635	631	x 2	y 1				1
Sanilac.....	224	224						
Schoolcraft.....	53	53						
Shiawassee.....	276	276						
St. Clair.....	445	443	2					
St. Joseph.....	201	200		1				
Tuscola.....	233	233						
Van Buren.....	274	267	1	6				
Washtenaw.....	312	297	11	4				
Wayne.....	1,967	z 1,933	aa 28	6				
Wexford.....	116	116						

x 1 couple, male black, female mulatto.
y 1 couple, male mulatto, female black.

z 1 couple, male white, female black.
aa 2 couples, male black, female mulatto.

NATIVITY OF PERSONS MARRIED.

Table 36 shows the marriages in 1888, arranged according to the nativity of the persons married. Upon examination it is seen that there were 11,131 native-born grooms to 11,805 native-born brides, and 6,090 foreign-born grooms to 5,049 foreign-born brides. There were 12 grooms and 379 brides whose nativity was not stated in the returns. There were 1,350 native-born males who married foreign-born brides and 308 who married brides whose nativity was not returned. There were also 2,324 native-born females who married foreign-born males and eight who married males whose nativity was not given in the returns.

The percentage of native-born grooms to the whole number married was 64.59, in 1888, 66.02 in 1887, 67.73 in 1886, 68.51 in 1885, 66.70 in 1884 and 66.22 in 1883. The foreign-born percentage of grooms for the same period of years was 35.34 in 1888, 33.54 in 1887, 31.65 in 1886, 30.88 in 1885, 32.62 in 1884, and 33.00 in 1883. The native-born brides were 68.50 in 1888, 69.91 in 1887, 71.46 in 1886, 71.44 in 1885, 69.59 in 1884, and 69.62 in 1883. The foreign-born brides were 29.30 in 1888, 28.73 in 1887, 27.53 in 1886, 27.61 in 1885, 29.34 in 1884, and 29.33 in 1883.

TABLE 36—*By Nativity, the Number and Per Cent of Brides and Bridegrooms returned for the Year 1888.*

Bridegrooms and Brides,—Nativity Specified.		Brides, 1888.			Bridegrooms, 1888.	
		native-born.	Foreign-born.	Unknown.	Total of each nativity and all nativities.	Per cent of each nativity.
Bridegrooms	{ Native-born.....	9,473	1,350	308	11,131	64.59
	{ Foreign-born.....	2,324	3,698	68	6,090	35.34
	{ Unknown.....	8	1	3	12	.07
Brides	{ Whole No. of each nativity and total.....	11,805	5,049	379	17,233	-----
	{ Per cent of each nativity and total.....	68.50	29.30	2.20	-----	100.00

The marriage-rates for the total population and for the native and foreign-born inhabitants may be seen in Table 37. As compared with the year 1887, there is little difference in the percentage as computed for the total of all nativities, but there is a slight falling off in the per cents for the native and a corresponding increase in the per cents for the foreign-born. The year 1888 gives for the native-born, total 1.69, males 1.60, females 1.78; in 1887 they were, total 1.71, males 1.62, females 1.80. The foreign-born of 1888 were, total 2.29, males 2.24, females 2.35; in 1887 they were, total 2.18, males 2.10, females 2.28. The increase in the number of marriages for 1888, as shown by the above figures, comes from the foreign-born. This fact is also shown in the number of persons married; in 1887 there were 23,175 native-born persons married and 10,617 foreign-born; in 1888 there were 22,936 native-born persons married and 11,139 foreign-born. This shows an increase of 522 among the foreign-born and a decrease of 239 among the native-born.

In order to learn the actual marriage-rate, the number of marriages must be divided by the number of inhabitants at marriageable ages at the time of the occurrence of the marriages. The nearest approach to the actual marriage-rate for 1888 is that based upon marriages in 1888 and the inhabitants in 1884 as is done in the tabular exhibit which follows table 37. By this exhibit it appears that the marriage-rate among the native-born inhabitants in 1888, was slightly greater than among the foreign-born, and that it is greatest among the native-born females and least among the foreign-born males.

TABLE 37.—*Exhibiting by Sex, the Nativity of Persons Married in Michigan in 1888, and the Population in 1884.*

Nativity of Persons Married, 1888.	Marriages, 1888.		Population June 1, 1884, Represented by Marriages, 1888.			Persons Married, 1888.					
	Number.	Per cent of Total.	Totals.	Males.	Females.	Number.			Per cent of persons married in 1888 to population of same nativity, June 1, 1884.		
						Totals.	Males.	Females.	Totals.	Males.	Females.
Totals.....	17,233	100.00	1,852,460	973,877	878,572	34,466	17,233	17,233	1.86	1.77	1.96
Native-born.....	9,473	54.97	1,356,966	695,127	661,839	22,936	11,131	11,805	1.69	1.60	1.78
Foreign-born.....	3,608	21.46	496,633	272,115	214,517	11,139	6,060	5,049	2.29	2.24	2.35
Foreign male and native female.....	2,324	13.49									
Foreign female and native male.....	1,350	7.88									
Nativity unknown.....	388	2.25	8,854	6,635	2,213	391	12	379	4.42	.18	17.13
One or both native.....	13,147	76.29									
One or both foreign.....	7,372	42.78									

Nativity.	Inhabitants June 1, 1884, Aged 15 Years and Over.			Persons Married, 1888.			Per Cent of Persons Married in 1888 to Inhabitants June 1, 1884, Aged 15 Years and over.		
	Both sexes.	Males.	Females.	Both sexes.	Males.	Females.	Both sexes.	Males.	Females.
All nativities.....	1,213,634	649,588	564,046	34,466	17,233	17,233	2.84	2.65	3.05
Native.....	782,620	403,790	378,830	22,936	11,131	11,805	2.93	2.75	3.11
Foreign.....	423,384	239,827	183,557	11,139	6,060	5,049	2.63	2.54	2.75

In Table 38 are presented the percentages, for a period of fourteen years, from 1875 to 1888, with reference to the nativity of the persons married. The decrease in the percentage among the native-born is quite marked since the year 1885 as is also the increase in the foreign-born.

As compared with the average, the year 1888 presents even greater contrasts than with the year 1887, the native-born being 4.13 per cent less than the average, and the foreign-born 4.06 per cent greater than the average.

In the class of marriages of persons of mixed parentage, that is one native and the other foreign, there has been an increase in the class of foreign-born groom and native-born bride, and a corresponding decrease in the opposite class. As compared with the average however, there appears but little difference.

TABLE 38.—*Per Cent of Marriages, by Nativity, in Michigan for Fourteen Years, 1875-1888, and the Average for these Years.*

Years.	Both native-born.	Both foreign-born.	Native-born groom and foreign-born bride.	Foreign-born groom and native-born bride.	Unknown.
1875.....	61.55	16.08	7.85	12.88	2.14
1876.....	62.44	15.02	7.01	13.26	2.27
1877.....	63.33	14.31	7.18	13.05	2.13
1878.....	63.83	12.68	7.72	13.48	2.29
1879.....	64.15	12.78	7.40	13.56	2.11
1880.....	62.17	15.20	7.48	13.02	2.13
1881.....	59.30	18.00	8.18	12.75	1.77
1882.....	58.15	19.61	8.72	12.47	1.05
1883.....	57.19	20.60	8.65	12.27	1.29
1884.....	57.28	20.33	9.00	12.11	1.29
1885.....	59.14	18.85	8.90	12.13	1.18
1886.....	58.50	18.71	8.76	12.79	1.24
1887.....	56.65	20.22	8.47	13.10	1.56
1888.....	54.97	21.46	7.83	13.49	2.25
Average.....	59.90	17.40	8.05	12.88	1.77

AGES OF PERSONS MARRIED.

Table 39 gives the Average age, at time of marriage, of both males and females for all nativities, for the native and foreign-born and also for those of unknown nativities. In the average age for all nativities for 1888 there appears an increase of nearly a year as compared with those for previous years and the average. As usual the marriages of those of foreign nativity show a greater average age for both males and females than those of the native-born.

TABLE 39.—*By Nativity, the Average Age of Persons Married in Michigan in 1885-1888, and the Average for ten years, 1878-1887.*

Nativity of Persons Married.	1885.		1886.		1887.		1888.		Average Age for 10 Years, 1878-1887.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
All nativities.....	28.35	23.39	28.26	23.35	28.60	23.57	29.20	24.43	28.23	23.28
Native.....	27.81	22.87	27.78	22.85	28.17	23.17	28.07	23.00	27.78	22.86
Foreign.....	29.51	24.70	29.28	24.63	29.40	24.54	29.29	24.81	29.33	24.42
Unknown.....	30.62	23.95	28.44	24.26	29.85	23.69	30.25	25.49	29.44	23.95

Table 40 contains much that is interesting and valuable concerning the number and proportion of males and females married at each period of age in Michigan during the year 1888. The proportion of males married under 20 years of age was less in 1888 than in any year of the previous ten, being 2.86 in 1878 and 1.80 in 1888. The proportion of females married under 20 has decreased from 37.68 per cent in 1878 to 31.85 per cent in 1888. The average per cent for the period of ten years, 1878-1887, was 2.45 for males under 20 and 34.71 for females. The proportion of males married between the ages of 20 and 25 was slightly greater in 1888 than in 1887, but less than for any of the previous ten years, being 41.29 per cent in 1878 and 37.40 per cent in 1888. The average per cent for the ten years, 1878-1887, was 39.54. The proportion of females married at this period of age has increased each year for the last four years, being 36.64 per cent in 1885 and 40.34 in 1888. The average per cent for the period of ten years, 1878-1887, was 38.41.

Over 70 per cent of all the males married in Michigan 1888 were between the ages of 20 and 30 years, and 54.77 per cent of all the females were married at the same period of years.

PERSONS MARRIED UNDER TWENTY-ONE YEARS OF AGE.

The number of persons who were married in Michigan in, 1888 under the age of twenty-one years may also be seen in Table 40. There were 8,107, of whom 833 were males and 7,274 were females. This is not as large a number as has been returned for previous years, that for 1887 being 8,455 persons, of whom 1,071 were males and 7,384 were females. In 1886, there were 8,536 persons, of whom 1,088 were males and 7,448 were females. The percentage of all married under 21 to the whole number married was 23.52 in 1888, 24.79 in 1887, 25.66 in 1886, 25.23 in 1885, 25.14 in 1884. As may be seen from the above facts that, notwithstanding the fact that the number of marriages for 1888 was larger than for any year during the whole period of registration, the proportion of persons married under twenty-one years of age is less than for any of the above-mentioned years.

According to the marriage laws of Michigan, only males who have attained the full age of 18 years and females the full age of 16 years, are capable of contracting marriage. It is certainly gratifying to note the fact that in 1888 no males were married under the legal age and but 26 females, five at fourteen and 21 at fifteen years of age.

TABLE 40.—*Exhibiting, by Sex, and by Periods of Age, the Number and Per Cent of Persons Married during the Year 1888.*

Ages in Years and Periods.	Marriages, 1888.						
	Total number of Persons Married 1888.	Males.			Females.		
		Number Married.	Per cent of Total Married.	Per cent of Persons married at corres- ponding ages.	Number married.	Per cent of total married.	Per cent of Persons married at correspond- ing ages.
All ages	34,466	17,233	100.00	50.00	17,233	100.00	50.00
14.....	5				5	.08	100.00
15.....	21				21	.12	100.00
16.....	737				737	4.28	100.00
17.....	1,038				1,038	6.02	100.00
18.....	2,034	77	.45	3.78	1,957	11.86	96.22
19.....	1,964	233	1.35	11.86	1,731	10.04	88.14
20.....	2,308	523	3.04	22.66	1,785	10.36	77.34
21 to 25.....	11,069	5,922	34.37	53.40	5,167	29.96	46.60
25 to 30.....	8,166	5,690	32.96	69.56	2,486	14.43	30.44
30 to 35.....	2,955	2,106	12.22	71.27	849	4.93	28.73
35 to 40.....	1,469	962	5.58	65.49	507	2.94	34.51
40 to 45.....	918	589	3.42	64.16	329	1.91	35.84
45 to 50.....	582	361	2.10	62.03	221	1.23	37.97
50 to 55.....	414	254	1.47	61.35	160	.93	38.65
55 to 60.....	295	183	1.06	62.03	112	.56	37.97
60 to 65.....	192	131	.76	63.23	61	.35	31.77
65 to 70.....	138	109	.63	73.99	29	.17	21.01
70 to 75.....	74	62	.36	83.78	12	.07	16.22
75 to 80.....	31	23	.16	90.32	8	.02	9.68
80 and over.....	6	6	.03	100.00			
Unknown ages.....	30	7	.04	23.33	23	.13	76.67
Under 15.....	5				5	.03	100.00
15 to 20.....	5,794	310	1.80	5.35	5,484	31.82	94.65
20 to 25.....	13,397	6,445	37.40	48.11	6,952	40.34	51.89

MARRIAGES BY COUNTIES, NATIVITY, SEX AND AGE.

TABLE 41.—*Exhibiting for the State and Counties, by Sex, the Nativity and Age in Periods of Years, of Persons Married in Michigan during the year 1888.*

[illegible]

MARRIAGES, BY COUNTIES, NATIVITY, SEX AND AGE.

[illegible]

No returns from county clerk.

TABLE 41.—CONTINUED.—*Marriage by Counties, Nativity, and Periods of Age.*

Counties.	Number of couples married, 1888.	Nativity of Persons Married, 1888, Stated by Couples.								Sex Stated.	Marriages at Different Ages, Stated in periods of Years, 1888.																
		Both native-born.	Both foreign-born.	Foreign males, native females.	Foreign females, native males.	Females Unknown.		Females also Unknown.			Under 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80.	80 and over.	Unknown.		
						Males.	Females.	Native.	Foreign.																	Native.	Foreign.
Meosota.....	190	100	39	30	17	4			Males.....	2	79	59	21	13	6	4	2		2								
Menominee.....	243	35	165	37	6				Females.....	78	88	14	11	11	1	4	2		1								
Midland.....	76	44	10	10	11		1		Males.....	1	78	91	42	15	10	2	4										
Missaukee.....	38	20	9	5	4				Females.....	57	117	36	17	8	3	1	1	2							1		
Monroe.....	300	239	10	32	11	6	2		Males.....	31	27	8	4	1		1	1	2		1					1		
Montcalm.....	264	172	27	23	12	19	5	1	Females.....	1	11	12	4	1	5	3	1								1		
Montmorency.....	16	7	1	4		3	1		Males.....	13	17	2	3	2		1											
Muskegon.....	427	170	154	60	42		1		Females.....	5	134	72	41	21	10	7	3			2	3	2					
Newaygo.....	168	106	20	21	10	8	1	1	Males.....	81	137	46	10	9	5	5	3	3	1								
									Females.....	3	91	75	30	17	16	11	9	6	3	1	2						
									Males.....	103	81	31	12	15	9	5	2	4	1	1							
									Females.....	8	8	4			2	2											
									Males.....	8	3		1		4												
									Females.....	8	154	141	62	22	20	4	5	7	3	1							
									Males.....	139	156	68	23	15	12	9	2	1	2								
									Females.....	3	68	45	22	14	4	5	3	2		1					1		
									Males.....	81	50	18	4	5	2	1	2	1	2						2		

TABLE 41.—CONTINUED.—*Marriages by Counties, Nativity, and Periods of Age.*

Counties.	Number of couples married, 1888.	Nativity of Persons Married 1888, Stated by Couples.						Sex Stated.	Marriages at Different Ages, Stated in Periods of Years, 1888.																		
		Both native-born.	Both foreign-born.	Foreign males, native females.	Females Unknown.		Males Unknown.		Both unknown.	Under 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80.	80 and over.	Both unknown.			
					Native.	Foreign.	Native.																		Foreign.		
St. Clair.....	445	188	105	76	48	18	9				1	{ Males.... Females... }	4	151	149	60	31	18	9	6	7	5	2	2	1	1	
St. Joseph.....	201	171	4	13	5	8						{ Males.... Females... }	7	79	58	22	6	10	7	3	4	3	1		1		
Tuscola.....	233	107	30	42	38	13	3					{ Males.... Females... }	4	90	74	30	12	3	8	5	2	2	2		1		
Van Buren.....	274	240	3	16	9	4	1	1				{ Males.... Females... }	7	116	82	28	6	8	5	2	3		3	1		1	3
Washtenaw.....	312	221	43	26	13	5	2	1	1			{ Males.... Females... }	2	95	116	36	17	17	9	7	6	3		3	1		
Wayne.....	1,967	714	721	323	205	3	1					{ Males.... Females... }	15	696	723	259	107	63	45	32	10	8	5	3	1		
Wexford.....	116	65	29	16	4	2						{ Males.... Females... }	435	980	377	90	56	38	21	10	9		1				

MANNER OF UNION BY AGES.

The last column of Table 42 shows the proportion of males married at the different periods of age during the year 1888, and the bottom line of the table shows the proportion of females married at the same periods of age. The table may be explained as follows: the 310 males who were married under twenty years of age, as shown in the column next to the last, married 247 females aged under 20, 59 aged 20 to 25, and 4 aged 25 to 30; in like manner read each number in the column headed "Total Males."

The 5,489 females who were married under 20 years of age, as seen in the second line from the bottom, 247 married males under 20, 3,120 married males 20 to 25, 1,640 married males 25 to 30, etc., down to one who married a groom 65 to 70. In a similar manner the other numbers in the line of "Total Females" are distributed throughout the table.

The period in which the largest number of males were married was 20 to 25, the number being 6,445, or 37.40 per cent of the total number at all ages. The largest number of females was married at the same period of age, being 6,952 or 40.34 per cent. These percentages are larger in 1888 than were those for 1887.

TABLE 42.—*Exhibiting the Number of each Sex, at each Period of Age, Married during the year 1888, and the Per Cent of Brides and of Bridegrooms at each Period of Age to Total at all ages.*

Ages of Males, 1888.	Ages of Females, 1888.														Total males.	Per cent of grooms at each age.
	Under 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80.	80 and over.	Unknown.	
Under 20.....	247	59	4												310	1.80
20 to 25.....	8,120	2,980	326	51	8	5	1							4	6,445	37.40
25 to 30.....	1,640	2,746	1,084	159	34	6	2	1						8	5,680	32.96
30 to 35.....	341	813	597	259	71	23	4	2						2	2,106	12.23
35 to 40.....	101	259	262	157	130	32	14	5	1			1			962	5.58
40 to 45.....	24	94	128	109	111	86	25	6	6						589	2.10
45 to 50.....	10	29	50	67	64	73	46	13	4	2	1			2	361	3.42
50 to 55.....	3	12	22	33	45	42	51	29	13	3	1				254	1.47
55 to 60.....	1	5	4	10	24	29	36	41	23	9	1				183	1.07
60 to 65.....	1	2	4	6	9	19	22	28	20	15	5				131	.76
65 to 70.....	1	2	3	1	10	10	11	17	27	16	8	3			109	.63
70 to 75.....		1	2	3	1	2	6	9	13	12	9	4			62	.36
75 to 80.....						2	3	9	4	4	3	1	2		28	.16
80 and over.....									1		1	3	1		6	.03
Unknown.....														7	7	.04
Total females..	5,489	6,952	2,486	849	507	329	221	160	112	61	29	12	3	23	17,233	-----
Per cent of brides at each age... }	31.85	40.34	14.43	4.93	2.94	1.91	1.28	.93	.65	.35	.17	.07	.02	.13	-----	100.00

DISPARITY OF AGE.

As in previous years, the returns of marriages for 1888 show that considerable disparity of age was not considered a hindrance to marriage by many who were matrimonially inclined. It is only possible to mention a few cases here, but those who desire to examine into such matters may do so by reference to Table 42. Among the more remarkable of these marriages may be mentioned a groom of 68 to a bride of 21, which was solemnized in Barry county; a groom of 65 to a bride of 19 in Kent county, a groom of 66 to a bride of 22 in Macomb county.

On the other hand there were quite a number of marriages where the bride was many years older than the groom. Of these the most note-worthy differences in the ages, were a groom of 46 to a bride of 60 in Newaygo county; and a groom of 22 to a bride of 46 in Wayne county.

In Table 43 may be seen the number of marriages in each county for the year 1888, together with the marriage-rates, or number of marriages per 100 of the population in 1884. By removing the decimal one place to the right it shows the number of marriages per 1,000 living.

TABLE 43.—*Exhibiting, by Counties, the number of Marriages in Michigan for the years 1886-1887, and 1888; the number as first returned, and the number returned since first Compilation for the years 1886 and 1887; the number of Inhabitants in 1884, and the Per Cent of Marriages in 1888 to Population in 1884.*

State and Counties.	Marriages.						Population 1884, represented by marriages in 1888.	Number of inhabitants in 1884 to one marriage in 1888.	Per cent of marriages in 1888 to population in 1884.	
	1886.			1887.						1888.
	Number as first re- turned and com- piled.	Number returned since first compli- cation.	Number returned previous to April 13, 1888.	Number as first re- turned and com- piled.	Number returne d since first compli- cation.	Number returned previous to April 13, 1888.				
State	16,631	27	16,658	17,050	122	17,172	17,233	1,852,460	107	.93
Alcona	27		27	26		26	25	4,028	161	.62
Alger	4		4	3	1	4	9	a		
Allegan	372		372	339	1	340	319	38,666	121	.83
Alpena	118		118	164		164	137	12,683	98	1.08
Antrim	88		88	68		68	78	8,761	112	.89
Arenac	28		28	32	2	34	32	4,027	126	.79
Baraga	15		15	15		15	28	3,039	109	.92
Barry	200	5	205	169		169	206	24,102	117	.85
Bay	358		358	334	4	338	447	51,221	115	.87
Benzie	31		31	31		31	25	4,389	176	.57
Berrien	602		602	543	2	545	376	37,776	100	1.00
Branch	279		279	273		273	242	27,661	114	.87
Calhoun	312		312	349		349	323	41,585	129	.78
Cass	235		235	215		215	172	21,202	123	.81
Charlevoix	41		41	74		74	88	9,275	105	.95
Cheboygan	86		86	79		79	93	9,946	107	.94
Chippewa	89		89	96		96	106	8,422	79	1.26
Clare	46		46	58		58	68	5,549	82	1.23
Clinton	214	2	216	210		210	229	27,135	118	.84
Crawford	16		16	25		25	30	2,389	80	1.26
Delta	100		100	127	1	128	149	9,992	67	1.49
Eaton	280	1	281	269		269	266	31,802	120	.84
Emmet	52		52	53		53	72	7,944	110	.91
Genesee	349		349	338		338	326	38,776	119	.84
Gladwin	15		15	23		23	18	1,539	86	1.17

a Organized since census was taken.

TABLE 43.—CONTINUED.—*Marriages, Corrected by Counties.*

Counties.	Marriages.						Population 1884, represented by marriages in 1888.	Number of inhabitants in 1884 to one marriage in 1888.	Per cent of marriages in 1888 to population in 1884.	
	1886.			1887.						1888.
	Number as first returned and compiled.	Number returned since first completion.	Number returned previous to April 13, 1889.	Number as first returned and compiled.	Number returned since first completion.	Number returned previous to April 13, 1889.				Number returned.
Gogebic.				99		99	121	b.		
Grand Traverse.	96		96	125	2	127	120	12,062	101 .99	
Gratiot.	209		209	214		214	238	25,049	105 .95	
Hilldale.	298		298	349		349	283	31,686	112 .89	
Houghton	251		251	257		257	331	26,146	79 1.27	
Huron.	140	3	143	156	1	157	169	24,521	145 .69	
Ingham.	317		317	338	6	344	334	34,969	105 .96	
Ionia.	266	2	268	282	1	283	272	32,559	120 .84	
Iosco.	102	1	103	139	2	141	123	10,602	86 1.16	
Iron.	16		16	13		13	36	b.		
Isabella.	159		159	154	1	155	146	16,011	110 .91	
Jackson.	339		339	302		302	337	45,232	134 .75	
Kalamazoo.	320		320	416	2	418	374	35,281	94 1.06	
Kalkaska.	25		25	44		44	52	4,493	86 1.16	
Kent.	1,002		1,002	919		919	1,048	84,600	81 1.24	
Keweenaw.	7		7	9		9	14	4,667	333 .30	
Lake.	39		39	40	1	41	69	7,539	109 .92	
Lapeer.	224		224	211		211	247	30,057	122 .82	
Leelanaw.	37		37	39		39	58	7,128	123 .81	
Lenawee.	514	2	516	463	2	465	349	49,584	142 .70	
Livingston.	171		171	168	4	172	167	21,568	129 .77	
Luce.				6	3	9	26	b.		
Mackinac.	42		42	51		51	64	5,171	81 1.24	
Macomb.	250		250	213		213	251	31,293	125 .80	
Manistee.	221		221	196	1	197	222	19,875	90 1.12	
Manitou a.	2		2	5		5				
Marquette.	216		216	329	3	332	345	31,397	91 1.10	
Mason.	111		111	114		114	127	13,221	104 .96	
Mecosta.	187		187	157		157	190	20,597	108 .92	
Menominee.	200	8	208	244	19	263	243	19,120	79 1.27	
Midland.	84		84	69		69	76	8,776	115 .87	
Missaukee.	22		22	22		22	38	3,386	89 1.12	
Monroe.	361		361	313		313	300	33,353	111 .90	

a No returns from county clerk.

b Organized since census was taken.

TABLE 43.—CONTINUED.—*Marriages, Corrected by Counties.*

Counties.	Marriages.							Population, 1884 represented by marriages in 1888.	Number of inhabitants in 1884 to one marriage in 1888.	Per cent of marriages in 1888 to population in 1884.
	1886.			1887.			1888.			
	Number as first returned and completed.	Number returned since first completion.	Number returned previous to April 13, 1889.	Number as first returned and completed.	Number returned since first completion.	Number returned previous to April 13, 1889.				
Montcalm	308	1	309	249	5	254	264	35,356	134	.75
Montmorency	6		6	6		6	16	845	53	1.89
Muskegon	314		314	364	1	365	427	37,554	88	1.14
Newaygo	150		150	140		140	168	18,996	113	.88
Oakland	315		315	325	3	328	320	41,100	128	.78
Oceana	106		106	122		122	135	14,519	108	.98
Ogemaw	42		42	38		38	52	3,687	70	1.43
Ontonagon	34		34	24		24	13	4,836	372	.27
Osceola	142		142	142		142	128	14,001	109	.91
Oscoda	6		6	25	2	27	18	1,374	76	1.31
Otsego	23		23	23		23	44	3,906	89	1.13
Ottawa	300		300	298	1	299	329	36,225	158	.63
Presque Isle	20		20	40		40	32	4,064	127	.79
Roscommon	9		9	12		12	17	2,588	152	.66
Saginaw	646		646	636		636	635	74,795	118	.85
Sanilac	208		208	201		201	224	29,583	132	.76
Schoolcraft	39		39	46		46	53	5,846	73	1.38
Shiawassee	212		212	231	2	233	276	28,078	102	.98
St. Clair	397		397	466		466	445	46,783	105	.95
St. Joseph	338		338	271		271	201	26,277	131	.76
Tuscola	281	2	283	276	3	279	233	30,726	132	.76
Van Buren	286		286	274		274	274	30,341	111	.90
Washtenaw	377		377	332	25	357	312	41,694	134	.75
Wayne	1,781		1,781	2,009	21	2,039	1,967	188,966	96	1.04
Wexford	111		111	126		126	116	10,518	91	1.13

DIVORCES IN MICHIGAN.

In the following tabular exhibit, which was published in the report for 1887, may be seen the number of marriages in Michigan, the number of divorces and the ratio of divorces to marriages, for the years 1871-1886. These statistics of divorces in Michigan are taken from the Report of the Commissioner of Labor, Carroll D. Wright, made to Congress in February, 1889.

Years.	Number of Marriages.	Number of Divorces.	Ratio of Divorces to Marriages.
1871.....	10,181	690	1 to 16.2
1872.....	9,882	620	1 to 15.9
1873.....	10,572	705	1 to 15.0
1874.....	11,041	794	1 to 13.9
1875.....	11,055	864	1 to 12.8
1876.....	10,858	800	1 to 13.5
1877.....	11,009	927	1 to 11.9
1878.....	12,221	993	1 to 12.3
1879.....	13,225	1,110	1 to 11.9
1880.....	14,149	1,149	1 to 12.3
1881.....	14,847	1,313	1 to 11.3
1882.....	16,178	1,335	1 to 12.1
1883.....	16,420	1,383	1 to 11.9
1884.....	15,002	1,239	1 to 12.1
1885.....	15,016	1,227	1 to 12.2
1886.....	16,631	1,339	1 to 12.4
1887.....	17,050		
Average.....	13,255	1,027	1 to 12.9

The above statistics concerning the number of divorces in Michigan show the remarkable fact that one divorce is granted in this State to about twelve marriages solemnized. The increase has been rapid and constant, the number running from 449 in 1867 to 1,339 in 1886. As the tendency of later legislation in this State seems rather to restrict than to extend the facilities for securing divorce, this growth can hardly be accounted for in this way. The increase in divorces is very much greater than the increase in population, as may be seen from the following figures taken from the report above referred to.

The increase in the population of the United States between the census years 1870 to 1880 was 30.1 per cent, while the divorces for the same time increased 79.4 per cent. In our own State the increase in population between the above years was 38.2 per cent, while the percentage of increase in the number of divorces was 107.4 per cent. These facts offer opportunities for instructive study in the subject of social science.

DEATHS, 1888.

The total number of deaths recorded in Michigan in 1888 was 21,764, a number greater by 2,282 than that returned in 1887. It exceeds the average annual mortality for the ten years, 1878-1887, by 4,942 and is the greatest number registered in any year since the beginning of registration in the State. This increase would naturally lead to the conclusion that there was an unsatisfactory state of the public health in Michigan in 1888. It rather means a more perfect registration in some parts of the State, and more especially in the city of Detroit. The number of deaths reported from Wayne county in 1887 was 3,543; in 1888 this number was increased to 5,301, a difference of 1,758, which is nearly as much as the entire increase for the State. When the causes of the deaths in 1888 are considered, which is done on subsequent pages, it would be found that this increase in the number of deaths is not due to any unusual prevalence of destructive diseases, but rather to a more perfect registration.

The following tabular statement shows the death-rate in Michigan, both as regards the number returned and the number corrected for omissions in the enumeration.

	Inhabitants in 1884 represented by Deaths in 1888.	Deaths as Returned.	Deaths Corrected for Omissions in Enumerating.	Per cent of Deaths to Inhabitants.	
				Deaths as Returned.	Deaths Corrected for Omissions.
Totals.....	1,845,778	21,764	26,043	1.18	1.41

The population, according to the State census of 1884, represented by the returns of deaths for 1888, was 1,845,778, and the ratio of deaths to population was 11.8 per 1,000. Corrected for omissions in the enumeration the number of deaths occurring in 1888 was estimated at 26,043, and the death-rate 14.1 to 1,000 living.

Because of the imperfections in the method of securing the statistics of deaths, it is impossible to form a correct idea of the death-rate in the State. Compared with other States having a system of registration it is very low, and if correct would be an occasion for rejoicing that we are more highly favored than the people of other States. It would be an assumption on our part, however, to believe that superior public health would account for the great disparity between the death-rate in Michigan and that of Massachusetts. The death-rate in that State, which has a more accurate system of registration than any other, for the year 1888 was 20.59 per thousand of the estimated population, and its average death-rate for the period of thirty-eight years, 1851-1888, was 19.48. In New Hampshire the death-rate is more than 18 per thousand, and in Rhode Island the annual death-rate exceeds 16 in every thousand. While these New England States have a larger population to a given territory than has Michigan, and a

large number of the people are subjected to dangers to health arising from factory life, still we must admit that the death-rate in this State would be larger if a better system of registration was adopted.

The following statistics, taken from the Registration Report of Massachusetts for 1888, show the death-rates in some of the foreign countries, and are given here by way of comparison.

England and Wales.....	18.8 per 1,000.
Scotland.....	18.7 " "
Ireland.....	18.3 " "
Sweden.....	19.2 " "
Austria.....	28.9 " "
France.....	22.0 " "
Switzerland.....	20.4 " "
Norway.....	16.1 " "

The average number of deaths for certain specified periods of time within the year 1888, as returned and as corrected for omissions in the enumeration, including those in unknown months, was as follows:

Periods of Time.	Deaths as Returned.	Corrected for Omissions.
Per quarter.....	5,441	6,511
Per month.....	1,814	2,170
Per week.....	419	501
Per day.....	60	71

The number of deaths by quarters, showing the influence of the seasons upon the mortality in Michigan for each of the years, 1886, 1887, 1888, and the average for ten years, 1878-1887, may be seen in Table 44. As compared with the average for ten years, the year 1888 shows a larger proportion for the first and second quarters and a smaller proportion for the third and fourth quarters. As in the other years of the table and the ten-year average, the largest mortality in 1888 occurred in the quarter ending with September, and the least number in the quarter ending with March. The order of the quarters beginning with the highest, was as follows: third, fourth, second, first, not only for 1888 but for each year and the average.

In the lower part of the table the returns of deaths are corrected for omissions, and it is seen that the third quarter still maintains its place as having the greatest proportion of deaths.

TABLE 44.—Deaths in Michigan by Quarters of the year, Exhibiting the Number and Per Cent of Totals as Returned and Corrected for the years 1886–1888, and the Average for Ten Years, 1878–1887.

Totals and Months with which Quarters end.		1886.		1887.		1888.		Average for 10 Years, 1878–1887.	
		Num- ber.	Per Cent of Total.	Num- ber.	Per Cent of Total.	Num- ber.	Per Cent of Total.	Num- ber.	Per Cent of Total.
Totals.....		18,187	100.00	19,482	100.00	21,764	100.00	16,822	100.00
As Returned.	March.....	3,620	19.90	4,058	20.88	4,866	22.36	3,421	20.34
	June.....	4,058	22.28	4,476	22.98	5,394	24.78	3,845	22.86
	September.....	5,287	28.90	5,886	30.21	5,986	27.28	4,891	29.07
	December.....	5,217	28.69	4,996	25.64	5,502	25.28	4,611	27.41
	Unknown.....	60	.33	66	.34	66	.30	54	.32
Average *.....		4,547	25.00	4,871	25.00	5,441	25.00	4,206	25.00
Totals.....		25,210	100.00	27,251	100.00	26,043	100.00	24,434	100.00
As Corrected for Omissions.	March.....	5,717	22.68	6,443	23.64	6,253	24.01	5,716	23.39
	June.....	5,949	23.60	6,597	24.21	6,637	25.49	5,937	24.30
	September.....	7,053	27.97	7,971	29.25	6,955	26.70	6,866	28.10
	December.....	6,431	25.51	6,174	22.66	6,132	23.55	5,861	23.99
	Unknown.....	60	.24	66	.24	66	.25	54	.22
Average *.....		6,308	25.00	6,313	25.00	6,511	25.00	6,109	25.00

* Including deaths in unknown month.

The mortality by months for the years 1886, 1887, 1888 and the average for ten years, 1878–1887, may be found in Table 45. It seems that the mortality of every month in 1888, except July, was greater than that of the corresponding month in 1887. The spring months, March, April and May show the greatest difference in mortality over those in 1887, the month of May leading with 386. As usual August had the largest number of deaths and January the least number. The excess of August over January was 753, or 3.46 per cent. In the ten-year average the excess of greatest over least month was 724, or 4.30 per cent.

TABLE 45.—Exhibiting, by Months, the number and Per Cent of Deaths Returned for the Years 1886–1888, and the Average for Ten Years 1878–1887, the Months, in order of greatest first.

Order.	1886.			1887.			1888.			Average for 10 Years, 1878–1887.		
	Year and Months.	Numb'r.	Per Cent of Total.	Year and Months.	Numb'r.	Per Cent of Total.	Year and Months.	Numb'r.	Per Cent of Total.	Year and Months.	Numb'r.	Per Cent of Total.
	Year ..	18,187	100.00	Year	19,482	100.00	Year	21,764	100.00	Year ..	16,322	100.00
1	Sept. .	1,889	10.39	Aug.	2,055	10.55	Aug.	2,169	9.97	Aug. .	1,738	10.33
2	Aug. .	1,887	10.37	Sept. . .	1,916	9.83	Dec.	2,012	9.24	Sept. .	1,712	10.18
3	Dec. . .	1,841	10.12	July.	1,915	9.83	Sept. . .	1,978	9.09	Dec. . .	1,619	9.63
4	Oct. . .	1,761	9.68	Dec. . . .	1,743	8.95	Apr.	1,909	8.77	Oct. . .	1,549	9.21
5	Nov. . .	1,615	8.88	Oct. . . .	1,699	8.72	Mar.	1,865	8.57	Nov. . .	1,443	8.58
6	Mar. . .	1,462	8.04	Apr.	1,599	8.21	May . . .	1,858	8.54	July . .	1,441	8.57
7	July . .	1,461	8.03	Nov.	1,554	7.96	Oct. . . .	1,848	8.49	Apr. . .	1,358	8.07
8	Apr. . .	1,396	7.68	Mar.	1,535	7.87	July.	1,789	8.22	May . .	1,313	7.90
9	May . .	1,376	7.57	May . . .	1,472	7.56	Nov.	1,642	7.54	Mar. . .	1,309	7.78
10	June . .	1,281	7.04	June . . .	1,405	7.21	June . . .	1,627	7.48	June . .	1,174	6.98
11	Feb. . .	1,098	6.01	Feb.	1,274	6.54	Feb.	1,585	7.28	Feb. . .	1,098	6.53
12	Jan. . .	1,065	5.86	Jan. . . .	1,249	6.41	Jan.	1,416	6.51	Jan. . .	1,014	6.08
	Unk. . .	60	.33	Unk. . . .	66	.34	Unk. . . .	66	.30	Unk. . .	54	.32
	Av. . . .	1,516	8.33	Av.	1,624	8.33	Av.	1,814	8.33	Av. . . .	1,402	8.33

SEX OF DECEDENTS.

Table 46 shows the mortality of males and females in Michigan for a period of fourteen years, 1875–1888, and the average for these years. In 1888, the deaths of males exceed the deaths of females by 1,698; they were in the proportion of 117 deaths of males to every 100 deaths of females, or 54 males and 46 females in each 100 decedents. It will be noticed that each year the male decedents exceed the female decedents, the average for the fourteen years being 115 males to 100 females. When the excess of males in the population is considered it accounts in a great measure for this excess of mortality among males and somewhat modifies the inference that might be drawn from the above figures. The death-rate among males, the number of deaths to each thousand living in 1884, was 12.09 that among females was 11.45.

TABLE 46.—*Number and Per Cent of Deaths of Males and Females Returned in Michigan for the years 1875-1888. (Unknown sex excluded.)*

Years.	Deaths of Males as returned.	Deaths of Females as returned.	Deaths of Males to 100 deaths of Females.	Per cent of each sex to total of both sexes.			
				Males.	Females.	Excess of the sexes.	
						Males.	Females.
1875.....	6,448	5,484	117.6	54.04	45.96	8.08	-----
1876.....	6,756	5,761	117.8	53.97	46.03	7.94	-----
1877.....	6,827	6,040	113.0	53.06	46.94	6.12	-----
1878.....	6,632	6,082	109.0	52.16	47.84	4.32	-----
1879.....	7,522	6,848	109.8	52.34	47.66	4.68	-----
1880.....	8,645	7,410	116.7	53.85	46.15	7.70	-----
1881.....	10,263	8,910	115.2	53.53	46.47	7.06	-----
1882.....	8,713	7,664	113.7	53.20	46.80	6.40	-----
1883.....	9,101	7,748	117.5	54.02	45.98	8.04	-----
1884.....	9,589	8,385	114.4	53.35	46.65	6.70	-----
1885.....	9,025	7,569	119.2	54.89	45.61	8.78	-----
1886.....	9,725	8,402	115.7	53.65	46.35	7.30	-----
1887.....	10,568	8,877	119.0	54.34	45.66	8.68	-----
1888.....	11,722	10,024	116.9	53.90	46.10	7.80	-----
Average.....	8,681	7,515	115.4	53.56	46.44	7.12	-----

OMISSIONS IN THE ENUMERATION OF DEATHS.

Applying the method of correction, used in previous reports, for omissions in the enumeration because of the long time elapsing between the occurrence of the deaths and their enumeration, it is found to be necessary to increase the number of deaths returned for 1888 by about 20 per cent in order to obtain the number of deaths which probably occurred, according to that evidence. It is probable that the actual death-rate was greater than given in Table 47, because based upon an assumed relation between the numbers for December, 1887, and January, 1888, and any unusual death-rate in either of those months would have a great influence upon the correction. The small death-rate for December, 1887, as compared with that for other years, makes the number to be added smaller for 1888.

The order of the months in Table 47 is changed from that of Table 45 because it is thought that the omissions bear a direct relation to the time between the occurrence of the deaths and their enumeration, and that the per cent to be added to each month should be more or less as the time is longer or shorter.

TABLE 47.—*Exhibiting by Months the Number and Per Cent of Deaths, as corrected for omissions in the enumeration, for the years 1886-1888, and the Average for ten years, 1878-1887, months arranged in order by number, greatest first.*

Order.	1886.			1887.			1888.			Average for 10 Years, 1878-1887.		
	Months.	Numb'r.	Per Cent of Total.	Months.	Numb'r.	Per Cent of Total.	Months.	Numb'r.	Per Cent of Total.	Months.	Numb'r.	Per Cent of Total.
	Total..	25,210	100.00	Total....	27,251	100.00	Total....	26,043	100.00	Total..	24,434	100.00
1	Aug...	2,547	10.10	Aug.....	2,788	10.21	Aug.....	2,543	9.77	Aug...	2,444	10.00
2	Sept..	2,477	9.82	July.....	2,669	9.79	Apr.....	2,384	9.15	Sept..	2,330	9.54
3	Mar...	2,258	8.96	Sept....	2,519	9.24	Mar.....	2,364	9.08	Apr..	2,153	8.81
4	Oct...	2,240	8.89	Apr.....	2,417	8.87	May.....	2,284	8.77	Mar...	2,135	8.74
5	Dec....	2,199	8.72	Mar.....	2,381	8.74	Sept....	2,281	8.76	July..	2,092	8.56
6	Apr...	2,102	8.34	May.....	2,167	7.95	Dec.....	2,205	8.47	Oct...	2,089	8.54
7	July...	2,029	8.05	Oct.....	2,167	7.95	July.....	2,131	8.18	May..	2,027	8.30
8	May...	2,018	8.00	Dec.....	2,096	7.66	Oct.....	2,096	8.05	Dec....	1,996	8.13
9	Nov...	1,992	7.90	Jan.....	2,096	7.47	Feb.....	2,040	7.83	Feb..	1,841	7.53
10	June..	1,829	7.25	Feb.....	2,026	7.44	June...	1,969	7.56	Nov...	1,836	7.52
11	Feb....	1,731	6.87	June...	2,013	7.39	Jan.....	1,849	7.10	June..	1,757	7.19
12	Jan...	1,728	6.86	Nov.....	1,921	7.05	Nov.....	1,831	7.03	Jan...	1,740	7.12
	Unk...	60	.24	Unk....	66	.24	Unk....	66	.25	Unk..	54	.22
	Av. a..	2,101	8.33	Av. a....	2,271	8.33	Av. a....	2,170	8.33	Av. a..	2,096	8.53

* Including deaths in unknown month.

AGES OF PERSONS WHO DIED IN MICHIGAN IN 1888.

The relation of age and sex to mortality is shown in Tables 48 and 49. It appears that of all the deaths returned in 1888, 27.49 per cent, more than a fourth, were those of infants under one year of age, and 38.96 per cent were those of young children under five years of age. Such a large proportion of infant-mortality affects the general mortality-rate at all ages very largely. As compared with the year 1887, and the average in Table 49, the percentage of deaths under one year of age in 1888, was more than in 1887, and also more than the average. The percentage of deaths under 5 was more than that of 1887, but less than the average for the twelve years, 1877-1888.

The proportion of males and females among the decedents at different ages is also shown in Table 48. In infancy and childhood the deaths of males largely predominate, corresponding with the excess of males among the births. At ages from ten to forty, the ratio is reversed, and the deaths of females exceed those of males, the ratio at the period from twenty to thirty being 9.80 per cent greater for females.

In Massachusetts the percentage of deaths under one year of age in 1888, was only 21.07, and that of deaths under 5 was 32.09. As compared with the percentages of those in our own State, they are much lower, and seem to indicate a higher rate of infant-mortality in Michigan.

The percentage of deaths between 20 and 30 was slightly less in 1888 than in 1887, and also less than the average. As may be seen, nearly nine per cent of the total deaths are contributed at these ages.

TABLE 48.—*Exhibiting, by Sex, and by Age in Periods of Years the number and Proportion of Persons returned as having Died in Michigan during the Year 1888.*

Ages in Years and Periods.	Number of Deaths, 1888.				Per Cent of Deaths at each Age to Total at all Ages.			Per Cent of each Sex to Total of Both Sexes.				Excess of the Sexes by Number.		Males to 100 females.
	Totals.	Males.	Females.	Unknown.	Totals.	Males.	Females.	Males.	Females.	Excess.		Males.	Females.	
										Males.	Females.			
All ages.....	21,764	11,722	10,024	18	100.00	100.00	100.00	53.90	46.10	7.80	-----	1,694	----	117
Under 1	5,983	3,399	2,567	17	27.49	29.00	25.61	56.97	43.03	13.94	-----	832	----	132
1 to 2.....	1,149	613	536	----	5.28	5.23	5.35	53.85	46.65	6.70	-----	77	----	114
2 to 3.....	585	308	276	1	2.69	2.63	2.75	52.74	47.26	5.48	-----	32	----	112
3 to 4.....	461	226	235	----	2.12	1.93	2.34	49.02	50.98	-----	1.96	-----	9	96
4 to 5.....	302	153	149	----	1.39	1.31	1.49	50.66	49.34	1.32	-----	4	----	103
All under 5.....	8,480	4,699	3,763	18	38.96	40.09	37.54	55.53	44.47	11.06	-----	936	----	125
5 to 10.....	881	454	427	----	4.05	3.87	4.26	51.53	48.47	3.06	-----	27	----	105
10 to 15.....	565	267	298	----	2.60	2.28	2.97	47.26	52.74	-----	5.48	-----	31	90
15 to 20.....	832	402	430	----	3.82	3.43	4.29	48.32	51.68	-----	3.36	-----	28	93
20 to 25.....	969	455	514	----	4.45	3.88	5.13	46.96	53.04	-----	6.08	-----	59	89
25 to 30.....	885	426	459	----	4.07	3.63	4.58	48.14	51.86	-----	3.72	-----	33	93
30 to 35.....	694	336	358	----	3.19	2.87	3.57	48.41	51.59	-----	3.18	-----	22	94
35 to 40.....	780	381	399	----	3.58	3.25	3.98	48.85	51.15	-----	2.30	-----	18	95
40 to 45.....	679	353	326	----	3.12	3.01	3.25	51.99	48.01	3.98	-----	27	----	108
45 to 50.....	659	385	274	----	3.03	3.28	2.74	58.42	41.58	16.84	-----	11	----	141
50 to 55.....	666	356	310	----	3.06	3.04	3.09	53.45	46.55	6.90	-----	46	----	118
55 to 60.....	698	376	322	----	3.21	3.21	3.21	53.87	46.13	7.74	-----	54	----	117
60 to 65.....	841	486	355	----	3.86	4.15	3.54	57.79	42.21	15.58	-----	131	----	137
65 to 70.....	952	550	402	----	4.37	4.69	4.01	57.77	42.23	15.54	-----	148	----	137
70 to 75.....	947	543	404	----	4.35	4.63	4.03	57.34	42.66	14.68	-----	139	----	134
75 to 80.....	889	506	383	----	4.09	4.32	3.82	56.92	43.08	13.84	-----	123	----	132
80 to 85.....	591	312	279	----	2.72	2.66	2.78	52.79	47.21	5.58	-----	33	----	119
85 to 90.....	337	192	145	----	1.55	1.64	1.45	56.97	43.03	13.94	-----	47	----	132
90 to 95.....	90	44	46	----	.41	.37	.46	48.89	51.11	-----	2.22	-----	2	96
95 to 100.....	21	14	7	----	.10	.12	.07	66.67	33.33	33.34	-----	7	----	200
100 and over.....	3	1	2	----	.01	.01	.02	33.33	66.67	-----	33.34	-----	1	50
Unknown ages...	305	184	121	----	1.40	1.57	1.21	60.33	39.67	20.66	-----	63	----	152

TABLE 49.—*Exhibiting the Per Cent of Deaths at Different Ages, for the Years 1877-1888, and Average for the Twelve Years.*

Years.	Under 1 Year.	Under 5 Years.	20 to 30.	All others.
1877.....	26.11	40.30	8.68	51.02
1878.....	25.22	39.22	8.43	52.35
1879.....	24.68	39.52	8.23	52.25
1880.....	24.66	39.95	7.96	52.09
1881.....	24.20	40.63	9.00	50.37
1882.....	24.38	38.81	8.72	52.47
1883.....	24.88	38.26	9.37	52.37
1884.....	27.22	40.05	9.08	50.37
1885.....	26.10	37.61	8.95	53.44
1886.....	26.22	38.79	8.80	52.41
1887.....	25.39	37.94	8.84	53.22
1888.....	27.49	38.96	8.52	52.52
Average.....	25.54	39.17	8.72	52.11

The following tabular exhibit is prepared in order to show the number of deaths at certain periods of age with the number of persons living at the same periods, according to the last census. It is thus seen that the death-rate is much larger for infants under one year of age than for children under five, being nearly three times greater in 1888. In 1887, the per cents were 9.98 and 3.27, respectively.

	Under 1 year.	Under 5 years.	20 to 30.	All others.
Deaths, 1888.....	5,983	8,480	1,854	11,430
Population, 1884.....	49,574	225,973	353,394	1,274,291
Per cent of deaths to Population.....	12.07	3.75	.52	.90

DEATHS BY MONTHS AT DIFFERENT AGES.

The evidence set forth in Table 50 is valuable in showing the influence of seasons upon the mortality among persons at different periods of age. According to the statistics here presented, the three months of July, August and September were the most fatal to children under one and also to children under five years of age. The proportion of deaths of those under one to deaths of those at all ages was greater in August than in any other month of the year. This is also true of those under five years of age. The summer diseases of children, cholera infantum, diarrhea, and dysentery, contribute largely to this increased death-rate during the midsummer season.

In 1888, the largest proportion of decedents between the ages of 5 and 10 years occurred in the month of October, December being second in order; of persons between the ages of 10 and 20, the largest proportion occurred in the month of October, May being second; of those between the ages of 20 to 50 the largest proportion was in December, closely followed by the months of March, April and May; while for those 50 and over, the largest proportion was in March with the months of April and December close at hand.

The teaching of this table appears to be that the months of July and August are most dangerous to children under five years of age, and that to older children and adults the fall and winter months are more dangerous to life. The spring months of 1888 appear to have been more than usually fatal.

Tables 51 and 52 give further details concerning deaths by sex, by months, and periods of age.

TABLE 50.—*The relation of the Deaths at different Periods of Age to Deaths at All Ages, by Months; and for the same Period of Age, the relation of the Deaths in each month to the Deaths in the Year 1888.*

Deaths by Ages in Periods of Years.		Year 1888. ^a	Months, 1888.											
			Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
All Ages.....			1,416	1,585	1,865	1,969	1,858	1,627	1,789	2,169	1,978	1,848	1,642	2,012
Number.....			337	380	419	430	480	454	606	851	653	432	404	524
Under 1.....			23.80	23.97	22.47	22.52	25.83	27.90	33.87	39.23	33.01	23.37	24.61	26.04
Per cent of all ages.....														
Per cent of deaths, 1888.....			5.64	6.37	7.02	7.20	8.04	7.60	10.15	14.25	10.94	7.24	6.77	8.78
Number.....			518	562	611	655	696	641	821	1,121	886	640	582	732
All under 5.....			36.57	35.46	32.76	31.31	37.46	39.40	45.89	51.68	44.79	34.63	35.44	36.38
Per cent of all ages.....														
Per cent of deaths, 1888.....			6.12	6.64	7.22	7.73	8.22	7.57	9.70	13.24	10.47	7.56	6.88	8.65
Number.....			57	69	87	83	53	74	58	63	65	107	76	88
5 to 10.....			4.03	4.35	4.66	4.35	2.85	4.55	3.24	2.90	3.28	5.79	4.63	4.37
Per cent of all ages.....														
Per cent of deaths, 1888.....			6.48	7.84	9.89	9.43	6.02	8.41	6.59	7.16	7.38	12.16	8.64	10.00
Number.....			89	102	113	118	132	104	108	121	109	154	119	125
10 to 20.....			6.29	6.44	6.06	6.18	7.10	6.39	6.04	5.58	5.51	8.33	7.25	6.21
Per cent of all ages.....														
Per cent of deaths, 1888.....			6.38	7.32	8.11	8.47	9.47	7.46	7.74	8.68	7.82	11.05	8.54	8.96
Number.....			313	353	443	444	420	339	355	383	369	409	380	449
20 to 50.....			22.11	22.27	23.75	23.26	22.61	20.84	19.84	17.66	18.66	22.13	23.14	22.32
Per cent of all ages.....														
Per cent of deaths, 1888.....			6.72	7.58	9.51	9.54	9.02	7.28	7.62	8.23	7.92	8.78	8.16	9.64
Number.....			418	473	560	581	539	448	425	450	532	510	467	584
50 and over.....			29.52	29.84	31.64	30.43	29.01	27.53	23.76	20.75	26.90	27.60	28.44	29.03
Per cent of all ages.....														
Per cent of deaths, 1888.....			6.95	7.86	9.81	9.66	8.96	7.45	7.06	7.48	8.84	8.47	7.76	9.71
Number.....			21	26	21	28	18	21	22	31	17	28	18	34
Unknown ages.....			1.48	1.64	1.13	1.47	.97	1.29	1.23	1.43	.86	1.52	1.10	1.69
Per cent of all ages.....														
Per cent of deaths, 1888.....			7.37	9.12	7.37	9.82	6.32	7.37	7.72	10.88	5.96	9.82	6.32	11.93

^a Excluding unknown month.

TABLE 51.—*Exhibiting by Sex and by Age in Periods of years, the Number of Persons Returned, as having died in Michigan during the Year 1888.*

Ages in Periods of Years.	Sex.	Year, 1888.	Months, 1888.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
All ages.....	Totals.....	21,764	1416	1585	1865	1909	1858	1627	1789	2169	1978	1848	1642	2012	66
	Males.....	11,722	752	890	998	991	1011	982	941	1156	1072	1004	898	1099	38
	Females.....	10,024	661	752	866	916	846	695	846	1013	905	844	743	911	26
	Unknown.....	18	3	3	1	2	1	—	2	—	1	—	1	2	2
Under 1.....	Totals.....	5,983	337	380	419	430	480	454	606	851	653	432	404	524	13
	Males.....	3,399	183	228	248	229	277	264	315	494	372	294	232	316	7
	Females.....	2,567	151	149	171	199	202	190	289	357	280	198	171	206	4
	Unknown.....	17	3	3	—	2	1	—	2	—	1	—	1	2	2
All under 5.....	Totals.....	8,480	518	562	611	655	696	641	821	1121	886	640	582	732	15
	Males.....	4,699	278	322	359	351	384	363	424	641	478	351	320	419	9
	Females.....	3,763	237	237	251	302	311	278	395	480	407	289	261	311	4
	Unknown.....	18	3	3	1	2	1	—	2	—	1	—	1	2	2
5 to 10.....	Totals.....	881	57	69	87	83	53	74	58	63	65	107	76	88	1
	Males.....	454	30	34	44	42	28	44	24	31	36	56	38	46	1
	Females.....	427	27	35	43	41	25	30	34	32	29	51	38	42	—
10 to 15.....	Totals.....	565	41	41	38	50	52	39	45	48	37	69	51	52	2
	Males.....	267	16	17	15	22	29	15	24	19	21	32	31	23	1
	Females.....	298	25	24	23	28	23	24	21	29	16	35	20	29	1
15 to 20.....	Totals.....	882	48	61	75	68	80	65	63	73	72	85	68	73	1
	Males.....	402	22	28	34	31	30	41	33	30	32	44	36	41	—
	Females.....	430	26	33	41	37	50	24	30	43	40	41	32	32	1
20 to 25.....	Totals.....	969	44	79	88	92	86	83	69	80	86	88	82	89	3
	Males.....	455	27	39	37	35	39	50	28	32	40	37	41	48	2
	Females.....	514	17	40	51	57	47	33	41	48	46	51	41	41	1
25 to 30.....	Totals.....	885	68	63	85	81	80	56	80	80	57	78	70	85	2
	Males.....	426	35	31	40	30	37	28	43	39	29	47	32	35	—
	Females.....	459	33	32	45	51	43	28	37	41	28	31	38	50	2
30 to 35.....	Totals.....	694	48	45	62	59	65	54	61	59	65	60	49	64	3
	Males.....	336	28	22	30	24	30	29	27	24	33	33	26	29	1
	Females.....	358	20	23	32	35	35	25	34	35	32	27	23	35	2

TABLE 51.—CONTINUED.—Deaths by Periods of Age, by Sex, by Month.

Ages in Periods of Years.	Sex.	Year, 1888.	Months, 1888.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
35 to 40.....	{ Totals	780	54	70	76	72	69	50	51	75	58	68	68	69	---
	{ Males	381	17	34	39	36	41	25	25	35	31	35	36	27	---
	{ Females.....	399	37	36	37	36	28	25	26	40	27	33	32	42	---
40 to 45.....	{ Totals	679	48	50	69	77	62	51	38	53	49	48	57	76	1
	{ Males	353	24	24	34	39	38	28	25	21	25	23	30	41	1
	{ Females.....	326	24	26	35	38	24	23	13	32	24	25	27	35	---
45 to 50.....	{ Totals	659	51	46	63	63	58	45	56	36	54	67	54	66	---
	{ Males	385	31	19	44	35	35	35	36	21	29	31	34	35	---
	{ Females.....	274	20	27	19	28	23	10	20	15	25	36	20	31	---
50 to 55.....	{ Totals	666	44	63	47	71	69	44	40	56	49	69	45	67	2
	{ Males	356	24	27	22	38	41	28	19	30	25	33	24	44	1
	{ Females.....	310	20	36	25	33	28	16	21	26	24	36	21	23	1
55 to 60.....	{ Totals	698	60	49	58	58	73	57	55	55	67	50	49	67	---
	{ Males	376	35	21	29	34	37	35	32	33	31	26	25	38	---
	{ Females.....	322	25	28	29	24	36	22	23	22	36	24	24	29	---
60 to 65.....	{ Totals	841	59	59	78	80	65	64	66	68	76	80	76	67	3
	{ Males	486	29	32	46	51	42	37	42	31	43	49	46	36	2
	{ Females.....	355	30	27	32	29	23	27	24	37	33	31	30	31	1
65 to 70.....	{ Totals	952	62	78	95	93	79	69	63	75	85	69	72	109	3
	{ Males	550	29	45	48	49	51	39	33	48	52	48	43	64	1
	{ Females.....	402	33	33	47	44	28	30	30	27	33	21	29	45	2
70 to 75.....	{ Totals	947	60	62	108	99	76	74	61	70	84	84	75	92	2
	{ Males	543	34	32	58	61	39	42	30	41	58	47	46	54	1
	{ Females.....	404	26	30	50	38	37	32	31	29	26	37	29	38	1
75 to 80.....	{ Totals	889	56	71	97	81	80	75	60	53	77	71	64	101	3
	{ Males	506	30	37	51	45	44	47	34	30	47	45	40	55	1
	{ Females.....	383	26	34	46	36	36	28	26	23	30	26	24	46	2
80 to 85.....	{ Totals	591	53	55	58	49	51	42	51	33	55	46	49	46	3
	{ Males	312	31	29	33	24	23	17	30	13	34	25	22	23	3
	{ Females.....	279	22	26	25	25	23	25	21	20	21	21	27	23	---
85 to 90.....	{ Totals	337	18	26	37	42	35	15	22	30	29	29	27	25	2
	{ Males	192	13	13	21	22	23	8	15	13	15	17	11	15	1
	{ Females.....	145	5	13	16	20	12	7	7	12	14	12	16	10	1
90 to 95.....	{ Totals	90	5	8	10	7	9	6	5	9	7	8	8	8	---
	{ Males	44	4	5	6	4	3	4	4	2	3	4	2	3	---
	{ Females.....	46	1	3	4	3	6	2	1	7	4	4	6	5	---

TABLE 51.—CONTINUED.—*Deaths by Periods of Age, by Sex, by Month.*

Ages in Periods of Years.	Sex.	Year, 1888.	Months, 1888.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
95 to 100.....	{ Totals	21	1	1	2	1	1	2	2	1	3	4	1	2	...
	{ Males	14	1	1	1	1	1	2	2	...	1	2	1	1	...
	{ Females.....	7	...	...	1	...	...	...	...	1	2	2	...	1	...
100 and over.....	{ Totals	3	...	1	...	...	1	...	...	...	...	...	1	...	...
	{ Males	1	...	...	...	...	1	...	...	...	...	...	...	...	...
	{ Females.....	2	...	1	...	...	...	...	...	...	...	...	1	...	...
Unknown.....	{ Totals	305	21	26	21	28	18	21	22	31	17	28	18	34	20
	{ Males.....	184	14	18	7	17	10	15	11	17	9	17	14	22	13
	{ Females.....	121	7	8	14	11	8	6	11	14	8	11	4	12	7

TABLE 52.—*Exhibiting, by Sex, and by Months, the Number returned as having Died in Michigan during the Year 1888, at each and every Age, the Age stated in Twelfths of a Year, for those under One Year, and in Years for those over One Year of Age.*

Ages in Years.	Sex.	Year, 1888.	Months, 1888.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
Under 1-12.....	Totals	2,796	197	208	218	235	242	213	229	298	226	210	225	298	7
	Males.....	1,651	103	123	131	120	145	130	132	187	143	118	132	184	3
	Females.....	1,128	91	82	87	113	96	83	95	106	82	92	92	107	2
	Unknown.....	17	3	3	---	2	1	---	2	---	1	---	1	2	2
1-12.....	Totals	458	21	24	37	36	39	28	47	66	60	31	33	36	---
	Males.....	245	14	17	25	17	18	14	19	37	29	17	19	19	---
	Females.....	213	7	7	12	19	21	14	28	29	31	14	14	17	---
2-12.....	Totals	429	21	20	23	32	36	37	42	57	51	34	33	42	1
	Males.....	225	12	14	11	19	24	19	19	29	27	16	15	19	1
	Females.....	204	9	6	12	13	12	18	23	28	24	18	18	23	---
3-12.....	Totals	379	18	17	17	23	32	28	54	63	45	32	25	25	---
	Males.....	214	14	6	9	13	19	16	30	37	23	15	11	16	---
	Females.....	165	4	11	8	10	13	12	24	26	17	17	14	9	---
4-12.....	Totals	315	13	16	20	15	23	23	38	72	47	19	9	19	1
	Males.....	155	8	4	6	10	7	11	21	39	24	8	6	11	---
	Females.....	160	5	12	14	5	16	12	17	33	23	11	3	8	1
5-12.....	Totals	290	14	15	19	15	13	17	36	56	52	12	21	18	2
	Males.....	164	8	11	12	7	8	11	16	28	31	5	12	14	1
	Females.....	126	6	4	7	8	5	6	20	28	21	7	9	4	1
6-12.....	Totals	267	5	16	10	8	13	18	40	56	43	18	12	22	1
	Males.....	149	4	10	5	7	9	10	18	32	22	10	7	14	1
	Females.....	118	1	6	5	1	4	8	22	24	26	8	5	8	---
7-12.....	Totals	213	4	14	13	15	10	17	22	47	30	20	8	18	---
	Males.....	137	1	11	11	10	6	12	10	27	13	12	7	12	---
	Females.....	81	3	3	2	5	4	5	12	20	12	8	1	6	---
8-12.....	Totals	241	13	12	19	13	25	13	28	39	30	19	12	18	---
	Males.....	137	4	7	12	6	14	5	18	24	17	9	9	12	---
	Females.....	104	9	5	7	7	11	8	10	15	13	10	3	6	---
9-12.....	Totals	252	14	16	24	11	21	27	36	40	14	22	12	14	1
	Males.....	143	9	8	14	7	8	17	23	22	5	15	7	7	1
	Females.....	109	5	8	10	4	13	10	13	18	9	7	5	7	---

TABLE 52.—CONTINUED.—*Deaths by Ages, by Sex, by Months.*

Ages in Years.	Sex.	Year, 1888.	Months, 1888.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
10-12	Totals	173	10	9	9	8	15	20	22	34	23	4	10	9	---
	Males	93	4	8	8	6	11	13	6	14	13	2	5	3	---
	Females	80	6	1	1	2	4	7	16	20	10	2	5	6	---
11-12	Totals	165	7	13	10	19	11	13	12	28	27	11	4	10	---
	Males	86	2	9	4	7	8	6	3	18	15	7	2	5	---
	Females	79	5	4	6	12	3	7	9	10	12	4	2	5	---
1	Totals	1,149	75	76	75	101	110	82	101	150	130	93	73	82	1
	Males	613	40	47	46	53	58	46	49	82	60	49	33	49	1
	Females	536	35	29	29	48	52	36	52	68	70	44	40	33	---
2	Totals	585	36	51	45	52	45	37	52	55	49	54	56	53	---
	Males	308	19	24	27	29	20	20	27	33	24	31	30	24	---
	Females	276	17	27	17	23	25	17	25	22	25	23	26	29	---
	Unknown	1	---	---	1	---	---	---	---	---	---	---	---	---	---
3	Totals	461	37	33	44	46	30	42	39	40	34	39	27	50	---
	Males	226	16	14	23	27	13	22	19	19	14	20	12	27	---
	Females	235	21	19	21	19	17	20	20	21	20	19	15	23	---
4	Totals	302	33	22	28	26	31	26	23	25	20	22	22	23	1
	Males	153	20	9	15	13	16	11	14	13	8	17	13	3	1
	Females	149	13	13	13	13	15	15	9	12	12	5	9	20	---
5	Totals	257	13	19	32	33	17	21	13	15	19	23	26	23	---
	Males	138	9	14	15	14	8	17	3	5	10	14	15	14	---
	Females	119	4	5	17	19	9	4	10	10	9	9	11	12	---
6	Totals	180	12	12	15	15	8	20	11	13	12	23	20	19	---
	Males	96	5	5	8	9	5	11	7	6	5	15	11	9	---
	Females	84	7	7	7	6	3	9	4	7	7	8	9	10	---
7	Totals	162	11	16	18	15	8	11	10	8	14	20	14	17	---
	Males	79	4	9	12	8	3	4	3	6	8	9	5	8	---
	Females	83	7	7	6	7	5	7	7	2	6	11	9	9	---
8	Totals	139	10	12	8	8	11	11	12	13	10	21	6	17	---
	Males	73	5	5	3	4	6	6	7	8	6	10	3	10	---
	Females	66	5	7	5	4	5	5	5	5	4	11	3	7	---
9	Totals	143	11	10	14	12	9	11	12	14	10	20	10	9	1
	Males	68	7	1	6	7	6	6	4	6	7	8	4	5	1
	Females	75	4	9	8	5	3	5	8	8	3	12	6	4	---
10	Totals	117	8	10	10	12	12	7	6	8	7	19	11	7	---
	Males	63	4	3	6	6	7	3	5	2	6	9	9	3	---
	Females	54	4	7	4	6	5	4	1	6	1	10	2	4	---

TABLE 52.—CONTINUED.—*Deaths by Ages, by Sex, by Months.*

Ages in Years.	Sex.	Year, 1888.	Months, 1888.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
11	Totals.....	111	5	8	7	6	14	11	8	9	9	16	9	9	
	Males.....	57	2	3	3	5	8	4	5	3	4	9	6	5	
	Females.....	54	3	5	4	1	6	7	3	6	5	7	3	4	
12	Totals.....	98	4	9	7	10	7	6	8	8	4	11	7	11	
	Males.....	46	3	6	3	5	5	2	3	2	1	4	6	6	
	Females.....	47	1	3	4	5	2	4	5	6	3	7	1	5	
13	Totals.....	107	7	4	3	11	7	7	14	9	7	12	14	11	
	Males.....	47	2	2		3	3	3	9	6	4	5	6	3	
	Females.....	60	5	2	3	8	4	4	5	3	3	7	8	8	
14	Totals.....	137	17	10	11	11	12	8	9	14	10	11	10	14	
	Males.....	54	5	3	3	3	6	3	2	6	6	7	4	6	
	Females.....	83	12	7	8	8	6	5	7	8	4	4	6	8	
15	Totals.....	131	7	13	5	14	11	19	11	16	9	8	10	8	
	Males.....	61	3	5	1	8	4	11	6	5	4	5	5	4	
	Females.....	70	4	8	4	6	7	8	5	11	5	3	5	4	
16	Totals.....	133	7	11	20	12	13	10	9	12	8	11	5	15	
	Males.....	64	3	5	9	4	6	8	7	5	5	4	1	7	
	Females.....	69	4	6	11	8	7	2	2	7	3	7	4	8	
17	Totals.....	181	9	8	20	17	21	11	10	15	19	18	13	19	
	Males.....	87	5	4	10	7	7	7	5	7	7	9	8	11	
	Females.....	94	4	4	10	10	14	4	5	8	12	9	5	8	
18	Totals.....	177	13	11	12	8	14	14	12	15	17	30	15	16	
	Males.....	91	4	3	5	5	6	8	5	11	7	18	11	8	
	Females.....	86	9	8	7	3	8	6	7	4	10	12	4	8	
19	Totals.....	210	12	18	18	17	21	11	21	15	19	18	25	15	
	Males.....	99	7	11	9	7	7	7	10	2	9	8	11	11	
	Females.....	111	5	7	9	10	14	4	11	13	10	10	14	4	
20	Totals.....	195	13	13	14	23	16	11	11	15	22	17	22	18	
	Males.....	93	6	6	8	8	8	6	5	7	10	3	13	13	
	Females.....	102	7	7	6	15	8	5	6	8	12	14	9	5	
21	Totals.....	194	12	14	15	18	18	15	16	13	17	21	18	17	
	Males.....	106	9	9	9	8	12	9	8	3	9	10	9	11	
	Females.....	88	3	5	6	10	6	6	8	10	8	11	9	6	
22	Totals.....	194	11	15	19	16	21	14	23	17	13	14	10	19	
	Males.....	86	7	5	6	7	8	9	9	8	4	4	6	11	
	Females.....	108	4	10	13	9	13	5	14	9	9	10	4	8	

TABLE 52.—CONTINUED.—*Deaths by Ages, by Sex, by Months.*

Ages in Years.	Sex.	Year, 1888.	Months, 1888.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
23	Totals	184	4	14	17	18	17	19	12	23	12	18	15	15	
	Males	75	3	5	3	6	7	13	3	11	4	10	5	5	
	Females	109	1	9	14	12	10	6	9	12	8	8	10	10	
24	Totals	202	4	23	23	17	14	24	7	12	22	18	17	20	1
	Males	95	2	14	11	6	4	13	3	3	13	10	8	8	
	Females	107	2	9	12	11	10	11	4	9	9	8	9	12	1
25	Totals	155	12	13	10	14	17	5	12	12	10	20	16	13	1
	Males	82	4	8	5	9	7	3	8	3	4	14	11	6	
	Females	73	8	5	5	5	10	2	4	9	6	6	5	7	1
26	Totals	193	13	18	17	15	22	17	19	13	14	18	9	18	
	Males	102	8	9	11	6	10	11	8	9	7	12	4	7	
	Females	91	5	9	6	9	12	6	11	4	7	6	5	11	
27	Totals	176	10	10	25	16	9	11	15	22	12	17	13	16	
	Males	75	5	5	9	3	5	4	5	11	8	10	4	6	
	Females	101	5	5	16	13	4	7	10	11	4	7	9	10	
28	Totals	209	17	10	17	24	21	13	24	18	12	13	17	22	1
	Males	101	9	4	8	6	9	7	15	11	5	8	8	11	
	Females	108	8	6	9	18	12	6	9	7	7	5	9	11	1
29	Totals	152	16	12	16	12	11	10	10	15	9	10	15	16	
	Males	66	9	5	7	6	6	3	7	5	5	3	5	5	
	Females	86	7	7	9	6	5	7	3	10	4	7	10	11	
30	Totals	144	6	6	9	13	18	7	12	18	20	16	13	4	2
	Males	74	4	4	4	4	9	6	8	9	7	9	7	2	1
	Females	70	2	2	5	9	9	1	4	9	13	7	6	2	1
31	Totals	142	11	8	18	11	16	12	13	8	9	12	12	12	
	Males	59	2	3	8	3	7	8	3	3	5	8	5	4	
	Females	83	9	5	10	8	9	4	10	5	4	4	7	8	
32	Totals	160	10	13	14	13	11	15	16	15	16	12	12	13	
	Males	87	6	8	8	8	6	6	11	5	9	7	8	5	
	Females	73	4	5	6	5	5	9	5	10	7	5	4	8	
33	Totals	118	13	7	9	9	12	11	9	8	8	9	6	16	1
	Males	56	10	4	4	3	5	6	1	4	5	3	3	8	
	Females	62	3	3	5	6	7	5	8	4	3	6	3	8	1
34	Totals	130	8	11	12	13	8	9	11	10	12	11	6	19	
	Males	60	6	3	6	6	3	3	4	3	7	6	3	10	
	Females	70	2	8	6	7	5	6	7	7	5	5	3	9	

TABLE 52.—CONTINUED.—*Deaths by Ages, by Sex, by Months.*

Ages in Years.	Sex.	Year, 1888.	Months, 1888.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
35.....	Totals.....	179	8	16	19	19	13	11	11	18	16	13	15	20	.....
	Males.....	96	4	9	8	11	8	4	9	10	9	7	6	11	.....
	Females.....	83	4	7	11	8	5	7	2	8	7	6	9	9	.....
36.....	Totals.....	152	12	11	19	16	13	11	12	15	7	10	13	13	.....
	Males.....	69	4	7	9	9	8	4	5	2	3	7	7	4	.....
	Females.....	83	8	4	10	7	5	7	7	13	4	3	6	9	.....
37.....	Totals.....	152	15	12	15	7	12	14	11	17	14	10	10	15	.....
	Males.....	76	3	6	10	3	9	8	3	10	6	5	8	5	.....
	Females.....	76	12	6	5	4	3	6	8	7	8	5	2	10	.....
38.....	Totals.....	162	11	16	14	13	19	10	14	9	13	16	15	12	.....
	Males.....	71	3	6	7	4	10	6	5	5	7	8	6	4	.....
	Females.....	91	8	10	7	9	9	4	9	4	6	8	9	8	.....
39.....	Totals.....	135	8	15	9	17	12	4	3	16	8	19	15	9	.....
	Males.....	69	3	6	5	9	6	3	3	8	6	8	9	3	.....
	Females.....	66	5	9	4	8	6	1	.....	8	2	11	6	6	.....
40.....	Totals.....	153	8	14	11	13	15	12	6	10	13	12	16	22	1
	Males.....	78	3	5	5	8	8	5	2	3	8	6	12	12	1
	Females.....	75	5	9	6	5	7	7	4	7	5	6	4	10	.....
41.....	Totals.....	117	10	6	14	19	14	5	5	8	5	11	7	13	.....
	Males.....	64	6	3	8	9	9	.....	3	4	1	7	7	7	.....
	Females.....	53	4	3	6	10	5	5	2	4	4	4	.....	6	.....
42.....	Totals.....	139	9	11	16	12	7	10	11	12	10	8	13	20	.....
	Males.....	66	4	4	8	3	5	7	9	4	4	6	4	8	.....
	Females.....	73	5	7	8	9	2	3	2	8	6	2	9	12	.....
43.....	Totals.....	133	8	12	17	15	8	13	6	12	12	10	10	10	.....
	Males.....	69	5	7	9	9	5	8	4	5	6	2	2	7	.....
	Females.....	64	3	5	8	6	3	5	2	7	6	8	8	3	.....
44.....	Totals.....	137	13	7	11	18	18	11	10	11	9	7	11	11	.....
	Males.....	76	6	5	4	10	11	8	7	5	6	2	5	7	.....
	Females.....	61	7	2	7	8	7	3	3	6	3	5	6	4	.....
45.....	Totals.....	145	12	11	13	14	12	10	8	6	17	13	15	14	.....
	Males.....	82	6	7	8	9	7	7	7	2	8	6	8	7	.....
	Females.....	63	6	4	5	5	5	3	1	4	9	7	7	7	.....
46.....	Totals.....	117	8	11	7	8	12	9	6	10	5	13	10	18	.....
	Males.....	66	8	5	5	3	6	6	3	3	4	6	9	8	.....
	Females.....	51	.....	6	2	5	6	3	3	7	1	7	1	10	.....

DEATHS—BY AGES, BY SEX, BY MONTHS.

109

TABLE 52.—CONTINUED.—*Deaths by Ages, by Sex, by Months.*

Ages in Years.	Sex.	Year, 1888.	Months, 1888.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
47	Totals.....	138	14	7	15	16	13	6	15	7	8	14	7	16	---
	Males.....	81	10	4	10	9	9	4	8	6	3	9	4	5	---
	Females....	57	4	3	5	7	4	2	7	1	5	5	3	11	---
48	Totals.....	145	12	12	10	16	12	13	16	10	8	16	13	7	---
	Males.....	86	5	3	8	8	7	12	10	7	5	7	7	7	---
	Females....	59	7	9	2	8	5	1	6	3	3	9	6	---	---
49	Totals.....	114	5	5	18	9	9	7	11	3	16	11	9	11	---
	Males.....	70	2	---	13	6	6	6	8	3	9	3	6	8	---
	Females....	44	3	5	5	3	3	1	3	---	7	8	3	3	---
50	Totals.....	137	7	18	12	12	11	6	8	6	11	21	10	15	---
	Males.....	61	5	7	3	4	8	4	3	2	5	9	3	8	---
	Females....	76	2	11	9	8	3	2	5	4	6	12	7	7	---
51	Totals.....	102	7	8	7	12	10	9	3	8	11	9	11	7	---
	Males.....	48	4	4	3	7	6	7	---	5	3	2	3	4	---
	Females....	54	3	4	4	5	4	2	3	3	8	7	8	3	---
52	Totals.....	162	15	14	9	18	16	14	13	16	12	12	7	16	---
	Males.....	99	9	9	4	11	7	9	6	11	8	7	7	11	---
	Females....	63	6	5	5	7	9	5	7	5	4	5	---	5	---
53	Totals.....	111	7	8	10	7	12	3	8	15	7	9	9	15	1
	Males.....	53	5	2	4	3	7	1	7	5	3	2	5	9	---
	Females....	58	2	6	6	4	5	2	1	10	4	7	4	6	1
54	Totals.....	154	8	15	9	22	20	12	8	11	8	18	8	14	1
	Males.....	95	1	5	8	13	13	7	3	7	6	13	6	12	1
	Females....	59	7	10	1	9	7	5	5	4	2	5	2	2	---
55	Totals.....	144	11	6	13	8	17	12	5	15	15	14	8	20	---
	Males.....	79	7	2	6	4	9	11	4	12	7	6	3	8	---
	Females....	65	4	4	7	4	8	1	1	3	8	8	5	12	---
56	Totals.....	160	17	12	11	16	13	9	19	8	12	12	17	14	---
	Males.....	86	8	5	5	10	7	4	12	4	4	5	11	11	---
	Females....	74	9	7	6	6	6	5	7	4	8	7	6	3	---
57	Totals.....	124	10	15	14	9	13	7	11	9	11	11	6	8	---
	Males.....	72	8	7	7	7	7	2	7	5	7	8	4	3	---
	Females....	52	2	8	7	2	6	5	4	4	4	3	2	5	---
58	Totals.....	137	10	7	10	9	17	15	10	13	14	8	9	13	---
	Males.....	73	6	3	5	3	10	10	4	7	6	5	5	9	---
	Females....	64	4	4	5	6	7	5	6	6	8	3	4	6	---

TABLE 52.—CONTINUED.—Deaths by Ages, by Sex, by Months.

Ages in Years.	Sex.	Year, 1888.	Months, 1888.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
59.....	Totals.....	133	12	9	10	16	13	14	10	10	15	5	9	10	---
	Males.....	66	6	4	6	10	4	8	5	5	7	2	2	7	---
	Females.....	67	6	5	4	6	9	6	5	5	8	3	7	3	---
60.....	Totals.....	179	17	15	16	20	15	11	15	8	10	20	20	11	1
	Males.....	102	7	6	10	13	5	6	9	5	6	13	15	6	1
	Females.....	77	10	9	6	7	10	5	6	3	4	7	5	5	---
61.....	Totals.....	132	7	11	7	14	13	12	14	13	11	16	6	8	---
	Males.....	77	2	8	3	10	10	9	9	7	4	8	2	5	---
	Females.....	55	5	3	4	4	3	3	5	6	7	8	4	3	---
62.....	Totals.....	188	13	12	17	18	17	15	13	13	18	14	16	21	1
	Males.....	113	7	5	10	13	14	9	6	7	9	8	11	13	1
	Females.....	75	6	7	7	5	3	6	7	6	9	6	5	8	---
63.....	Totals.....	158	7	15	19	13	13	8	10	16	19	17	12	9	---
	Males.....	89	2	9	11	7	7	3	7	7	11	13	8	4	---
	Females.....	69	5	6	8	6	6	5	3	9	8	4	4	5	---
64.....	Totals.....	184	15	6	19	15	7	18	14	18	18	13	22	18	1
	Males.....	105	11	4	12	8	6	10	11	5	13	7	10	8	---
	Females.....	79	4	2	7	7	1	8	3	13	5	6	12	10	1
65.....	Totals.....	211	14	20	19	21	17	16	11	21	23	14	13	22	---
	Males.....	124	7	10	11	11	10	7	5	14	12	11	8	18	---
	Females.....	87	7	10	8	10	7	9	6	7	11	3	5	4	---
66.....	Totals.....	144	9	15	13	10	16	13	15	15	11	8	7	12	---
	Males.....	91	3	9	6	5	11	9	10	10	7	5	6	10	---
	Females.....	53	6	6	7	5	5	4	5	5	4	3	1	2	---
67.....	Totals.....	191	15	17	21	20	18	12	13	8	11	16	11	29	---
	Males.....	92	10	9	7	7	9	6	6	4	4	10	8	12	---
	Females.....	99	5	8	14	13	9	6	7	4	7	6	3	17	---
68.....	Totals.....	198	15	13	16	12	12	12	13	14	27	16	23	24	---
	Males.....	118	5	10	9	7	7	8	7	9	19	12	13	12	---
	Females.....	80	10	3	7	5	5	4	6	5	8	4	10	12	---
69.....	Totals.....	208	9	13	26	30	16	16	11	17	13	15	18	22	---
	Males.....	125	4	7	15	19	14	9	5	11	10	10	8	12	---
	Females.....	83	5	6	11	11	2	7	6	6	3	5	10	10	---
70.....	Totals.....	201	8	15	30	30	9	18	12	13	15	14	15	21	---
	Males.....	109	6	6	13	19	4	9	8	5	10	7	9	12	---
	Females.....	92	2	9	17	11	5	9	4	8	5	7	6	9	---

DEATHS—BY AGES, BY SEX, BY MONTHS.

111

TABLE 52.—CONTINUED.—*Deaths by Ages, by Sex, by Months.*

Ages in Years.	Sex.	Year, 1888.	Months, 1888.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
71.....	Totals.....	153	8	13	23	13	12	9	6	11	13	19	8	17	1
	Males.....	91	6	7	15	6	6	3	2	8	9	12	8	9	---
	Females.....	62	2	6	8	7	6	6	4	3	4	7	---	8	1
72.....	Totals.....	221	16	8	19	12	24	20	21	17	23	25	20	16	---
	Males.....	127	7	4	9	7	15	12	10	7	16	17	11	12	---
	Females.....	94	9	4	10	5	9	8	11	10	7	8	9	4	---
73.....	Totals.....	198	18	13	18	17	18	16	10	17	19	13	17	22	---
	Males.....	113	11	8	11	13	7	11	5	13	14	4	8	8	---
	Females.....	85	7	5	7	4	11	5	5	4	5	9	9	14	---
74.....	Totals.....	174	10	13	18	27	13	11	12	12	14	13	15	16	---
	Males.....	103	4	7	10	16	7	7	5	8	9	7	10	13	---
	Females.....	71	6	6	8	11	6	4	7	4	5	6	5	3	---
75.....	Totals.....	200	15	20	19	13	18	13	14	16	16	20	14	21	1
	Males.....	119	8	8	10	9	8	7	8	9	14	12	8	17	1
	Females.....	81	7	12	9	4	10	6	6	7	2	8	6	4	---
76.....	Totals.....	220	9	17	25	24	21	16	11	12	22	18	18	26	1
	Males.....	129	5	13	13	13	14	10	5	7	14	12	13	10	---
	Females.....	91	4	4	12	11	7	6	6	5	8	6	5	16	1
77.....	Totals.....	166	16	13	21	13	16	15	8	7	14	10	14	19	---
	Males.....	93	11	8	9	8	8	8	6	6	7	7	8	7	---
	Females.....	73	5	5	12	5	8	7	2	1	7	3	6	12	---
78.....	Totals.....	173	8	13	22	16	11	17	11	10	16	18	11	20	---
	Males.....	81	2	6	11	4	4	12	4	3	5	12	7	11	---
	Females.....	92	6	7	11	12	7	5	7	7	11	6	4	9	---
79.....	Totals.....	130	8	8	10	15	14	14	16	8	9	5	7	15	1
	Males.....	84	4	2	8	11	10	10	11	5	7	2	4	10	---
	Females.....	46	4	6	2	4	4	4	5	3	2	3	3	5	1
80.....	Totals.....	131	13	13	9	7	7	7	10	7	16	10	17	15	---
	Males.....	68	7	6	6	3	3	2	9	1	9	7	8	7	---
	Females.....	63	6	7	3	4	4	5	1	6	7	3	9	8	---
81.....	Totals.....	129	17	12	11	12	14	9	12	7	8	9	10	8	---
	Males.....	76	13	9	6	6	8	3	7	4	6	5	6	3	---
	Females.....	53	4	3	5	6	6	6	5	3	2	4	4	5	---
82.....	Totals.....	118	8	14	17	11	7	11	7	5	13	9	7	8	1
	Males.....	59	3	9	7	6	3	5	3	3	9	5	1	4	1
	Females.....	59	5	5	10	5	4	6	4	2	4	4	6	4	---

TABLE 52.—CONTINUED.—Deaths by Ages, by Sex, by Months.

Ages in Years.	Sex.	Year, 1888.	Months, 1888.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
83.....	Totals.....	108	8	8	7	8	8	7	9	9	10	9	9	9	2
	Males.....	50	4	1	3	3	5	3	6	3	5	5	4	6	2
	Females.....	58	4	7	4	5	3	4	3	6	5	4	5	3	---
84.....	Totals.....	110	7	8	14	11	15	8	13	5	8	9	6	6	---
	Males.....	59	4	4	11	6	9	4	5	2	5	3	3	3	---
	Females.....	51	3	4	3	5	6	4	8	3	3	6	3	3	---
85.....	Totals.....	92	9	7	16	9	6	2	4	5	13	8	6	6	1
	Males.....	51	6	3	11	3	4	1	3	3	8	4	2	3	---
	Females.....	41	3	4	5	6	2	1	1	2	5	4	4	3	1
86.....	Totals.....	63	1	6	7	6	10	5	2	9	4	---	10	3	---
	Males.....	35	1	5	3	4	6	2	1	5	3	---	4	1	---
	Females.....	28	---	1	4	2	4	3	1	4	1	---	6	2	---
87.....	Totals.....	74	4	8	6	12	5	1	5	6	5	9	5	7	1
	Males.....	49	3	4	5	7	5	1	3	6	2	7	2	3	1
	Females.....	25	1	4	1	5	---	---	2	---	3	2	3	4	---
88.....	Totals.....	72	3	4	6	12	10	6	6	5	3	8	3	6	---
	Males.....	40	3	---	2	5	7	4	5	3	1	3	1	6	---
	Females.....	32	---	4	4	7	3	2	1	2	2	5	2	---	---
89.....	Totals.....	36	1	1	2	3	4	1	5	5	4	4	3	3	---
	Males.....	17	---	1	---	3	1	---	3	1	1	3	2	2	---
	Females.....	19	1	---	2	---	3	1	2	4	3	1	1	1	---
90.....	Totals.....	32	3	1	3	1	3	2	3	4	3	2	4	3	---
	Males.....	16	3	1	2	---	1	1	3	1	1	1	1	1	---
	Females.....	16	---	---	1	1	2	1	---	3	2	1	3	2	---
91.....	Totals.....	25	---	3	1	3	2	---	2	3	1	6	3	1	---
	Males.....	12	---	3	1	2	1	---	1	1	---	3	---	---	---
	Females.....	13	---	---	---	1	1	---	1	2	1	3	3	1	---
92.....	Totals.....	14	---	2	3	1	1	3	---	1	1	---	---	2	---
	Males.....	9	---	---	2	1	1	2	---	---	1	---	---	2	---
	Females.....	5	---	2	1	---	---	1	---	1	---	---	---	---	---
93.....	Totals.....	7	1	---	---	2	1	---	---	1	1	---	---	1	---
	Males.....	2	1	---	---	1	---	---	---	---	---	---	---	---	---
	Females.....	5	---	---	---	1	1	---	---	1	1	---	---	1	---
94.....	Totals.....	12	1	2	3	---	2	1	---	---	1	---	1	1	---
	Males.....	5	---	1	1	---	---	1	---	---	1	---	1	---	---
	Females.....	7	1	1	2	---	2	---	---	---	---	---	---	1	---

TABLE 52.—CONTINUED.—*Deaths by Ages, by Sex, by Months.*

Ages in Years.	Sex.	Year, 1888.	Months, 1888.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
95	Totals.....	1												1	
	Males.....	1												1	
	Females.....														
96	Totals.....	1									1				
	Males.....														
	Females.....	1									1				
97	Totals.....	6				1		1	2		1			1	
	Males.....	4				1		1	2						
	Females.....	2									1			1	
98	Totals.....	8	1	1	2		1	1				2			
	Males.....	6	1	1	1		1	1				1			
	Females.....	2			1							1			
99	Totals.....	5								1	1	2	1		
	Males.....	3									1	1	1		
	Females.....	2								1		1			
100 and over	Totals.....	3		1			1						1		
	Males.....	1					1								
	Females.....	2		1									1		
Unknown	Totals.....	305	21	26	21	28	18	21	22	31	17	28	18	34	20
	Males.....	184	14	18	7	17	10	15	11	17	9	17	14	22	13
	Females.....	121	7	8	14	11	8	6	11	14	8	11	4	12	7

INFANT MORTALITY.

More still-births were returned for the year 1888 than for any previous year since the beginning of registration, the number being 1,358. This is 461 more than the number returned in 1887 and 520 more than the average annual number returned for the ten years 1878-1887. As shown in Table 53, the per cent of still-births to total deaths was more in 1888 than for any other year of the table and also more than the average.

TABLE 53.—*The relation of Still-births to all Deaths as returned for the Years 1886-1888, and the Average for ten years 1878-1887, Corrected by Means of the Returns of Births.*

	Total Deaths and Still-births.			
	1886.	1887.	1888.	Average for 10 Years, 1878-1887.
All deaths.....	18,187	19,482	21,764	18,822
Number of still-births.....	909	897	1,358	898
Per cent of still-births to total deaths.....	5.00	4.60	6.24	4.98

RELATIONS OF DEATHS OF CHILDREN UNDER ONE TO BIRTHS.

The great mortality each year among children under one year of age makes the subject one of very great interest and importance. Tables 54, 55 and 56 have been devised for the purpose of showing the influence of different seasons upon the lives of young children. When it is considered that the probabilities of life are so much greater after the age of one year, the problem, how to guard against the dangers of the first year of life, becomes one for the most serious consideration.

Table 55 contains evidence concerning the number of children who were born in each month of the year 1887, and who died in 1887 and 1888 aged under one year. The greatest number of deaths under one year of age, according to the returns, occurred among children born in the month of April. The least mortality was among those born in the month of January. The table also shows the ratio of deaths under one year by sex. Of the 24,002 male children who were born in 1887, 2,863 or 11.93 per cent of them died before the age of one year. Of the 22,101 females born in 1887, 2,209 or 10 per cent of them died before their first birthday. The excess of the males over the females was 654, or 1.93 per cent. These percentages correspond very nearly with the average for the ten years, 1878-1887, the total being 10.89, males 11.93, and females 9.80. The average annual excess of males is thus seen to be a little over two per cent.

The first column of figures at the left of table 56 shows the number of children born in 1887, and in each month of that year, who died before reaching the age of one year. The first diagonal column shows that a very large proportion of the children die during the month of birth, or under one month old. Of the 382 children born in January, 1887, who died under one year of age, 129 died in January, the month of birth, 31 died in February, 35 died in March, and 16 died in April, etc. In like manner may be traced the deaths of children born in each month of the year 1887. It appears that of the 5,072 children born in 1887 who died under one year of age, 2,154 or 42.47 per cent of them died under the age of one month, 429 lived to the age of two months, 372 lived to the age of three months, etc. The last column in the table shows what per cent of the children born in each month of the year 1887, died during the month of birth. As seen from the figures, nearly 5 per cent of the children died during the month of birth.

TABLE 55. . . *Of the Children Born in 1887, the Number who Died during the Year 1887, the Number who Died during the Year 1888, under One Year of Age, and the Per Cent of Decedents under One Year to Children born in 1887, according to the Returns.*

Months of Births.	Born in 1887.				Births of Males, 1887, as Returned.	Males Born in 1887.				Births of Females, 1887, as Returned.	Females Born in 1887.			
	Died during the year 1887.	Died aged under 1 year during the year 1888.	Total died aged under 1 year.	Per cent of deaths under 1 to births.		Died during the year 1887.	Died aged under 1 year during the year 1888.	Total died aged under 1 year.	Per cent of deaths under 1 to births.		Died during the year 1887.	Died aged under 1 year during the year 1888.	Total died aged under 1 year.	Per cent of deaths under 1 to births.
Totals a	3,979	1,063	5,072	10.99	24,002	2,245	618	2,863	11.93	22,101	1,734	475	2,209	10.00
January	382	7	382	12.20	1,633	198	2	198	12.12	1,496	184	5	184	12.30
February	409	23	416	13.21	1,655	238	13	240	14.50	1,492	171	10	176	11.80
March	453	33	476	11.94	2,100	235	21	248	11.80	1,881	218	12	228	12.12
April	452	57	485	12.45	1,991	268	27	289	14.52	1,900	184	30	196	10.32
May	374	331	431	10.88	2,023	209	36	234	11.64	1,925	165	23	195	10.12
June	366	59	390	10.64	1,892	198	51	234	12.37	1,770	133	26	156	8.81
July	385	77	462	11.49	2,074	214	59	265	12.78	1,923	171	50	197	10.22
August	314	109	423	9.92	2,220	177	89	236	10.63	2,040	137	66	187	9.17
September	233	155	388	8.95	2,219	127	100	216	9.73	2,107	106	81	172	8.16
October	225	181	406	10.29	2,067	131	112	239	11.18	1,872	94	87	175	9.35
November	214	205	419	11.13	1,973	127	108	231	12.11	1,788	87	79	163	10.07
December	207	187	394	9.71	2,150	123	108	231	10.74	1,901	84	79	163	8.57

a Excluding 60 in unknown months.

TABLE 56.—*The Months of Births and of Deaths of Children Born in 1887, who Died under One Year of Age.*

Months of Births, 1887.		Months of Death, 1887.												Months of Death, 1888.												Per cent of children who died aged under 1 month. ^a	Births in 1887, as returned. ^b	Per cent of children who died aged under 1 month to all children born.
		Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.			
Born in 1887, died aged under 1 year.	5,072	129	191	278	298	293	293	504	540	460	373	311	399	140	148	141	104	108	108	120	141	64	15	4		46,166		
January	382	129	31	35	16	12	17	43	44	28	14	5	8													3,132	4.12	
February	416		160	42	25	21	17	51	35	22	13	12	11	7												3,150	5.08	
March	476			201	32	35	31	59	37	32	19	6	11	10	13											3,987	5.04	
April	485				220	13	29	54	47	35	29	14	11	14	9	10										3,896	5.65	
May	431					162	26	47	54	31	23	15	16	13	16	9	19									3,960	4.09	
June	390						148	39	60	42	13	8	21	4	12	24	8	11								3,966	4.04	
July	462							211	68	43	23	17	23	5	14	19	11	15	13							4,011	5.26	
August	423								195	58	28	16	17	14	16	13	13	21	20	12						4,266	4.57	
September	388									169	36	15	13	13	15	10	15	25	27	22	28					4,331	3.90	
October	406										175	26	24	18	16	19	8	10	13	36	34	27				3,944	4.43	
November	419											177	37	21	17	20	15	13	17	28	40	23	11			3,765	4.70	
December	394												307	21	20	17	15	13	18	22	39	14	4	4		4,058	5.10	
Deaths at each age. — Ages in Mos.	5,072												2154	439	372	322	277	270	245	210	220	240	170	163		42.47	4.67	

^a That is, per cent of children who died during month of birth to total born in 1887 who died aged under one year.^b Excluding 60 in unknown month, —24 males, 29 females, and 7 of unknown sex.^c That is, of the children born in 1887, the per cent who died during month of birth, —according to the returns of births and deaths. It should be borne in mind that probably a larger proportion of the births and of the deaths are returned for the later months of the year.

TABLE 57.—*The Relation, by Months, of the Decedents aged under One Month to the Births Returned for the year 1888.*

Sex, etc., Specified.	Year, 1888.	Months, 1888.											
		Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
(Births.....)	48,952	8,591	8,516	4,099	8,963	4,214	4,138	4,228	4,514	4,415	4,805	8,811	4,198
Totals.....	2,796	107	208	218	235	242	213	229	238	226	210	225	298
(Deaths aged under one month *.....)	5.71	5.58	5.92	5.07	5.94	5.74	5.15	5.42	6.49	5.12	4.88	5.90	6.99
(Per cent of deaths to births.....)	25,526	1,829	1,843	2,120	2,067	2,174	2,116	2,100	2,308	2,298	2,245	1,959	2,298
(Births.....)	1,651	108	128	131	120	145	190	182	187	143	118	132	194
Deaths aged under one month.....	6.47	5.63	6.67	6.18	5.81	6.67	6.14	6.08	7.81	6.90	5.26	6.74	8.01
(Per cent of deaths to births.....)	23,401	1,699	1,669	1,979	1,888	2,088	2,016	2,080	2,121	2,145	2,059	1,850	1,898
(Births.....)	1,128	91	82	87	113	98	88	95	106	82	92	92	107
Deaths aged under one month.....	4.82	5.36	4.91	4.40	6.00	4.71	4.12	4.68	5.00	3.73	4.47	4.97	5.65
(Per cent of deaths to births.....)	25	8	4	.....	8	2	1	8	.....	2	1	2	2
(Births.....)	17	8	8	.....	2	1	.....	2	.....	1	.....	1	2
Deaths aged under one month.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

* Still-births included.

TABLE 58.—*Exhibiting certain Details concerning persons returned as having Died aged One Hundred Years and over during the year 1888.*

Names of Centenarians, 1888.	Sex.	Color.	Married, Single or Widowed.	Birthplace.	Age.			Place of Death.			Date of Death, 1888.		Cause of Death.
					Years.	Months.	Days.	Occupation.	Town.	County.	Month.	Day.	
John Haywood.....	Male.....	White ..	Widower..	England....	101	.....	28	Farmer.....	Wayland.....	Allegan.....	May	8	Old age.
Hannah L. Greene.....	Female...	White ..	Widow ...	New York...	100	1	14	Housewife..	Keeler	Van Buren..	November..	28	Old age.
Millie Morgan.....	Female...	Black....	Widow ...	N. Carolina.	100	.....	.....	Unknown...	South Haven...	Van Buren..	February....	Unk.	Old age.

TABLE 59.—*Counties and Townships from which no Returns of Deaths for 1888 were received by this Department, showing Population in 1884.*

Counties.		Townships from which no Returns of Deaths for 1888 were Received. ^a	Population, June 1, 1884.																									
			Totals.						Color or Race.						Nativity.													
			Males.		Females.		White.		Black and Mulatto.		Indians.		Unknown Color.		Native.		Foreign.		Unknown.									
Total.....			7,880	4,621	3,259	7,728	4,537	3,191	11	11	8	8	1	1	97	49	48	44	24	20	2,825	2,384	1,788	966	Males.	Females.	8	9
Chippewa.....	{	Detour.....	615	384	231	565	353	212	8	8	1	1	1	1	1	41	23	18	13	76	290	154	1	1			1	1
		Drummond.....	400	241	159	311	185	116	2	2	84	43	41	8	1	2	106	82	135	76								
Kalkaska.....		Springfield.....	417	241	176	417	241	176													169	142	72	34			1	1
Lake.....	{	Chase.....	2,229	1,273	956	2,216	1,366	950	1	1	12	6	6								812	689	461	287				
		Lake.....	201	200	91	291	200	91														84	63	116	28			
Marquette.....		Richmond.....	370	205	165	370	205	165													86	90	119	75				
Mecosta.....		Mecosta.....	796	428	368	796	428	368													327	278	100	87	1	3		
Missaukee.....	{	Riverside.....	238	133	105	238	133	105													53	43	80	62				
		Beaver.....	300	177	123	300	177	123													151	110	26	13				
Newaygo.....	{	Brooks.....	1,655	590	465	1,655	590	465													470	394	114	68	6	3		
		Atherton.....	220	115	105	220	115	105													104	92	11	13				
Oscoda.....	{	Big Creek.....	143	82	61	143	82	61													65	52	17	9				
		Comins.....	149	128	21	149	128	21													56	16	72	5				
Schoolcraft.....	{	Harmon.....	124	66	58	124	66	58													44	52	22	6				
		Thompson.....	533	338	175	533	338	175													175	125	183	49			1	1

^a The townships of Mikado, Alcona county, and Trout Lake and White Fish, Chippewa county, were organized since the census was taken.

RELATIONS OF DEATHS OF CHILDREN TO BIRTHS, BY MONTHS.

Table 57 shows, by sex, by months, the number of births, the number of deaths of persons aged under one month, and the per cent of such deaths to births. Each year the proportion of males is greater than that of females and corresponds with the larger proportion of males born. This condition might be expected and accords with extended observations. The total number of deaths under one month was 2,796, being 5.71 per cent of the births. Of this number 6.47 per cent were among the males and 4.82 per cent were among the females.

DEATHS OF CENTENARIANS.

In Table 58 may be seen the names and other principal facts concerning those persons who died in 1888 after reaching the age of one hundred years or more. One of these individuals was a male and two were females, the male being the oldest of the three. Two were natives of this country and the male was born in England.

DELINQUENT TOWNSHIPS.

Table 59 shows the townships from which no returns of deaths were received for the year 1888, and also the counties in which they are located. There were 15 such townships representing a population, according to the census of 1884, of 7,880 and there is not much doubt that many deaths occurred in some of them, especially such townships as Chase in Lake county and Brooks in Newaygo county. Every supervisor who fails, by refusal or neglect, to make these returns is liable to a fine of one hundred dollars and costs of prosecution.

TOWNSHIPS IN WHICH NO DEATHS OCCURRED.

There were fifty-four townships in Michigan in which it was reported that no deaths occurred in 1888. Thirteen of these townships have been organized since the census of 1884 was taken, and for this reason it is impossible to give the number of their population. The number of deaths occurring in some of these thinly settled townships would, from several apparent causes, be small, but it is hardly credible that there were no deaths in townships having nearly a thousand inhabitants.

The number of deaths by sex, months and periods of age, which were returned from each and every county in the State, may be seen in Table 61.

TABLE 60.—*Counties and Townships in which it was reported that no Deaths occurred in 1888.*

Counties.	Townships, No Deaths in 1888.	Population.			Counties.	Townships, No Deaths in 1888.	Population.		
		Totals.	Males.	Females.			Totals.	Males.	Females.
Totals		8,445	4,938	3,507	Mason	Lincoln	181	76	55
Alcona	{ Curtis	179	97	82	Midland	Greendale	50	24	26
	{ Gustin a					{ Etna	123	76	47
Alger	{ Burt a				Missaukee	{ Forest	141	74	67
	{ Onota a					{ Reeder	422	278	144
	{ Colfax	179	91	88	Montmorency ..	{ Hillman a			
Benzie	{ Joyfield	198	103	95		{ Wheatfield a ..			
	{ Lake	65	38	27		{ Goodar a			
	{ Chandler	164	86	78		{ Horton	228	135	98
Charlevoix	{ Hudson	117	61	56	Ogemaw	{ Klacking	284	152	132
	{ Melrose	296	155	141		{ Logan a			
	{ Ellis	116	71	45		{ Mills	62	33	29
Cheboygan	{ Forest a					{ Richland	206	116	90
	{ Waverly	49	33	16	Osceola	{ Cedar	229	117	112
	{ Ball	130	77	53	Oscoda	{ Greenwood	83	39	44
	{ Blaine a					{ Charlton	208	169	39
Crawford	{ Frederic	355	240	115	Otsego	{ Chester a			
	{ Maple Forest ..	148	90	58		{ Corwith	613	338	275
	{ South Branch ..	200	110	90		{ Hayes	201	110	91
Delta	{ Baldwin	345	199	146	Presque Isle	{ Metz	221	122	99
Gogebic	{ Marenisco a ..					{ Gerrish	251	193	58
Iosco	{ Thompson	42	26	16	Roscommon	{ Markey a			
Kalkaska	{ Cold Springs ..	128	68	60		{ Richfield a			
Keweenaw	{ Clifton	182	96	86		{ Roscommon	161	104	57
	{ Center	79	46	33	Shiawassee	{ Fairfield	908	501	402
	{ Cherry Valley ..	223	140	88	Wexford	{ Springville	213	145	68
Lake	{ Eden	71	46	25		{ South Branch ..	95	55	40
	{ Yates	354	208	146					

a Organized since census was taken.

VITAL STATISTICS OF MICHIGAN, 1888.

TABLE 61—Exhibiting for the State and Counties, by Sex, the Number of Deaths returned in each Month of the Year 1888, and the Number of Deaths at each Period of Age.

State and Counties.	Sex.	Year, 1888.	Months, 1888.												Ages in Periods of Years, 1888.																			
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.	Under 5.	5 to 10.	10 to 15.	15 to 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80.	80 and over.	Unknown.	
State	Totals	21,764	1416	1385	1365	1906	1888	1627	1759	2169	1978	1848	1642	2012	66	8480	881	565	832	969	885	694	780	679	659	666	698	841	952	947	889	1042	905	
	Males	11,722	752	830	908	991	1011	932	941	1156	1072	1004	898	1099	38	4090	454	267	402	455	426	336	381	353	385	356	376	490	550	543	506	563	154	
	Females	10,024	661	752	896	916	846	695	846	1013	905	844	743	911	26	3763	427	298	430	514	459	358	399	326	274	310	322	355	402	404	383	479	121	
	Unknown.	18	3	3	1	2	1	2	2	2	1	1	1	1	2	18																		
Alcona	Totals	28	1	2	1	2	1	5	2	2	2	4	4	4	4	9	2	1	3	1	1	2	1	1	1	1	3	1	3			1		
	Males	17	1	1	1	1	1	3	2	2	1	2	2	2	2	5	1	1	2			2	2	1	1	1	2	1	3					
	Females	11	1	1	1	1	1	2	1	1	1	2	2	2	2	4	2		1	1	1	1	1	1	1	1	1	1			1			
	Totals	15						2	1	4	2	3	2	2	1	4	5	2	1	1	1	1	1	1	1	1	1	1	1					
Alger	Males	5						1	1	2			1	1	1	3												1						
	Females	10						2	2	2	2	3	1	1	3	2	2	1	1	1	1	1	1	1	1	1	1	1						
	Totals	423	33	34	35	33	33	35	40	38	47	33	30	32	142	8	6	23	18	15	10	4	19	8	21	19	25	32	19	24	27	3		
	Males	220	17	16	20	13	21	20	18	17	27	17	17	17	87	6	4	10	10	6	4	2	10	1	9	12	11	19	6	10	11	2		
Allegan	Females	203	16	18	15	20	12	15	22	21	20	16	13	15	55	2	2	13	8	9	6	2	9	7	12	7	14	13	13	14	16	1		
	Totals	117	8	3	8	8	13	19	11	22	11	13	7	8	1	86	4	5	2	4	1	2	1	2	2	2	2	2	2	2	2	2		
	Males	70	1	8	1	6	8	12	6	12	7	9	2	2	1	49	2	4	1	3	1	1	1	2	2	1	1	1	1	2	1	1		
	Females	47	2	2	2	2	5	7	5	10	4	4	5	1	1	37	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Alpena	Totals	76	5	7	7	7	5	3	7	11	7	5	5	7	30	6	3	2	4	5	4	2	2	2	2	2	2	3	4	3	3	1		
	Males	39	4	3	2	4	2	1	2	6	5	3	4	3	17	2	2	1	2	2	2	2	1	1	1	1	1	3	1	1	1	2	1	
	Females	37	1	4	5	3	3	2	5	5	2	2	1	4	13	4	1	1	1	2	3	2	1	2	1	2	1	1	1	3	2	1		

DEATHS—BY COUNTIES, BY SEX, BY MONTHS, BY AGE.

123

Arenac	Totals	48	5	7	3	8	4	2	4	1	4	5	5	5	20	3	1	2	4	3	4	1	1	2	1	1	1
	Males	31	4	4	2	1	3	1	3	1	2	4	1	5	15	2	1	1	3	1	2	1	1	2	1	1	1
	Females	17	1	3	1	2	1	1	1	1	1	2	1	4	5	1	1	1	1	2	2	3	1	1	1	1	1
Baraga	Totals	46	2	2	2	5	3	2	1	3	8	7	7	4	22				3	4	1	1	1	1			14
	Males	28	1		1	4	1	2	1	2	4	4	5	3	10				2	2	1	1	1			12	
	Females	18	1	2	1	1	2				1	4	3	2	1	12				1	2						2
Barry	Totals	177	6	13	10	15	24	8	17	14	18	16	18	18	48	9	6	9	9	2	12	2	3	7	6	11	13
	Males	92	5	5	4	7	10	7	8	10	11	8	10	7	25	5	2	6	2	2	3		1	5	2	7	
	Females	85	1	8	6	8	14	1	9	4	7	8	8	11	18	4	4	3	7		9	2	2	2	4	4	
Bay	Totals	451	25	37	31	48	51	29	52	58	39	35	30	45	1	250	22	21	15	21	17	11	14	14	17	11	
	Males	283	14	20	15	21	30	16	25	30	26	22	17	26	1	141	10	11	11	11	8	6	6	8	11	2	
	Females	218	11	17	16	27	21	13	27	28	13	13	13	19		100	12	10	4	10	9	5	8	6	6	9	
Benzie	Totals	52	1	2	5	7	6	2	2	7	8	4	4	2	2	19			2	1	3		1	3	1	2	
	Males	31	1	2	2	4	2	2	1	3	4	4	2	2	12			2								1	
	Females	21			3	3	4			1	4		2		7			1	1	1	1	1	1	1	1	2	
Berrien	Totals	335	24	25	32	29	29	23	36	27	35	24	27	1	85	14	9	20	15	15	13	6	11	9	13	18	
	Males	166	11	16	18	12	12	11	14	17	15	16	12	11	1	45	9	2	11	7	4	6	1	6	5	7	
	Females	169	13	9	14	17	17	12	9	19	12	19	12	16		40	5	7	9	8	11	7	5	5	3	8	
Branch	Totals	255	12	24	26	21	24	13	22	24	22	24	22	21	57	2	7	3	12	10	8	7	10	6	16		
	Males	128	6	14	15	12	11	7	12	13	7	8	12	11		30	1	3		2	5	3	4	4	2		
	Females	127	6	10	11	9	13	6	10	11	15	16	10	10		27	1	4	3	10	5	3	5	3	6	4	
Calhoun	Totals	384	13	25	31	47	30	22	31	38	31	34	34	42	6	76	10	9	7	17	14	12	15	13	16	18	
	Males	189	6	14	13	20	18	14	16	18	16	19	8	23	4	45	7	4	2	6	6	5	5	7	9	8	
	Females	195	7	11	18	27	12	8	15	20	15	15	26	19	2	31	3	5	5	11	8	7	10	6	7	10	
Cass	Totals	472	11	11	24	16	19	12	7	12	15	17	14	13	1	29	5	2	5	9	10	8	7	5	5	3	
	Males	92	6	5	12	9	11	5	2	7	9	7	7	11	1	19	1	1	2	2	7	1	3	4	4	3	
	Females	80	5	6	12	7	8	7	5	6	10	7	2			10	4	1	3	3	2	9	5	3	1	2	

TABLE 61.—CONTINUED.—Deaths by Counties, by Sex, by Months, and by Age, 1888.

Counties.	Sex.	Year, 1888.	Months, 1888.												Ages in Periods of Years, 1888.																		
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.																		
			Under 5.	5 to 10.	10 to 15.	15 to 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80.	80 and over.														
Charlevoix.	Totals.....	48	2	1	2	4	8	1	3	8	5	7	4	3	21	1	1	5	3	4	1	2	3	1	1	1	1	1	1	1	2		
	Males.....	20			1	1			2	3	5	4	3	1	8	1	1	3	1	1			1	1		1							
	Females.....	28	2	1	1	4	7	1	1	5			3	1	13			2	2	3	1	1	2	1		2	3	2	1	2			
Cheboygan.	Totals.....	103		6	7	3	6	12	11	13	11	9	9	16	52	10	6	2	5	3	7		3		2	4	2	1	1	1	2		
	Males.....	49		2	3	1	3	8	3	6	4	5	6	8	26	3	2		3	1	6		1		1								
	Females.....	54		4	4	2	3	4	8	7	7	4	3	8	26	7	4	2	2	2	1		2		2	2	1	2	1	1	1		
Chippewa.	Totals.....	63	4	7	6	1	6	5	5	8	6	5	6	4	26	6	2	6	5	3	3	2		2	4	2	1	1	1	1	1	1	
	Males.....	36	2	4	3	1	4	3	2	3	5	5	5	2	14	3	2	5	1	3	2	1		1	1	1	1	1	1	1	1	1	
	Females.....	27	2	3	3		2	2	3	6	3			1	12	3		1	4					1	3	1							
Clare.	Totals.....	79	10	7	6	14	8	12	3	1	4	7	2	5	33	4	2	2	2	10	3	5	3	4		3	2	2	1	1	3		
	Males.....	33	4	4	5	5	3	3	2		1	4	2		12	2				5	2	3	1	3		3							
	Females.....	46	6	3	1	9	5	9	1	1	3	3		5	21	2	2	2	2	5	1	2	2	1		2	1	2	1	1	3		
Clinton.	Totals.....	237	16	16	21	26	20	29	15	23	27	21	8	14	1	59	8	7	9	9	8	13	11	12	6	12	11	14	17	13	15	12	1
	Males.....	116	10	12	10	8	13	15	6	9	13	11	3	5	1	35	5	3	2	3	4	5	4	6	4	5	5	8	5	8	6	6	
	Females.....	121	6	4	11	18	7	14	9	14	14	10	5	9	24	3	4	7	6	4	8	7	6	6	2	7	6	6	9	8	7	6	1
Crawford.	Totals.....	7			1		1	2			2		1		2			1		1				1	1	1							
	Males.....	4						2			1		1		2									1	1								
	Females.....	3			1		1				1							1		1													
Delta.	Totals.....	165	7	3	7	12	13	15	15	26	26	23	9	9	84	6	4	5	13	13	5	8	5	1	8	2	4				2	3	
	Males.....	101	4	2	7	8	8	11	7	14	14	14	7	5	40	4	3	3	10	10	3	7	4	1	6	1	3				1	2	3
	Females.....	64	3	1		4	5	4	8	12	12	9	2	4	44	2	1	2	3	3	2	1	1		2	1					1	1	

Eaton	Totals	296	24	20	30	17	27	20	29	26	22	26	69	10	6	8	10	11	12	13	15	5	12	14	14	26	25	24	18	4			
	Males	160	14	11	18	7	14	14	13	14	12	16	15	96	3	4	1	4	3	8	5	7	2	6	8	9	17	11	18	15	3		
	Females	136	10	9	12	10	13	6	16	15	13	15	6	11	33	7	2	7	6	4	8	8	3	6	6	5	9	14	6	3	1		
Emmet	Totals	96	5	15	12	13	10	3	6	4	11	7	6	4	40	3	2	1	6	4	4	6	5	2	4	2	5	5	2	2	1		
	Males	50	4	8	7	5	4	3	3	3	7	5	1	22	2	1	3	1	3	1	1	1	1	2	2	3	3	2	1	2	1		
	Females	46	1	7	5	8	6	3	1	4	7	1	3	18	1	2	1	3	3	1	5	4	1	2	2	2	2	1	1	1	1		
Genesee	Totals	270	11	23	23	30	26	18	24	22	26	19	21	4	76	7	7	14	14	12	13	7	7	8	14	13	16	11	18	21	5		
	Males	126	5	11	14	11	16	11	7	10	10	12	7	10	2	39	3	3	5	3	5	4	2	2	8	9	9	3	11	10	4		
	Females	143	6	12	9	12	14	15	11	14	12	14	12	11	1	36	4	4	11	9	9	10	2	5	6	6	4	7	8	7	11	1	
Gladwin	Unknown	1												1																			
	Totals	14	2			1	2		2	2		3	1	1	9	2															2		
	Males	4					1		1			1	1		4																		
Gogebic	Totals	10	2			1	1		1	2		2		1	5	2															2		
	Males	168	19	9	19	13	9	19	8	24	9	7	12	20	100	4	2	5	14	13	6	4	2	1	4	1	2					10	
	Females	107	16	6	13	8	5	11	5	13	5	5	15	60	4	2	2	9	8	5	4	1	1	3								8	
Gr. Traverse	Totals	61	3	3	6	5	4	8	3	11	4	2	7	5	40			3	5	5	1		1	1	2						2		
	Males	131	12	11	13	8	12	13	9	4	14	13	13	9	32	1	4	11	4	5	8	5	7	5	6	8	6	5	6	10	6	2	
	Females	70	5	2	5	4	9	9	5	3	8	8	10	2	21	1	2	3		1	3	4	5	4	3	2	4	3	4	6	3	1	
Grant	Totals	61	7	9	8	4	3	4	4	1	6	5	3	7	11		2	8	4	4	5	1	2	1	3	6	2	2	2	4	3	1	
	Males	168	7	21	12	19	10	9	8	13	17	21	18	12	1	98	4	4	12	8	5	6	2	3	6	7	5	9	5	8	5	10	1
	Females	86	4	13	6	6	5	5	2	8	10	12	6	8	1	33	1	3	5	7	2	3	2	1	2	3	1	7	2	6	1	6	1
Hillsdale	Totals	82	3	8	6	13	5	4	6	5	7	9	12	4	35	3	1	7	1	3	3		2	4	4	4	2	3	2	4	4		
	Males	259	13	16	21	24	26	17	21	24	18	27	26	24	2	54	6	10	7	18	10	8	9	3	7	3	13	16	15	28	16	33	3
	Females	136	4	9	8	11	18	8	10	15	7	20	11	14	1	32	2	3	4	8	4	2	5		6	2	7	5	17	10	21	1	1
Houghton	Totals	123	9	7	13	13	8	9	11	9	11	7	15	10	1	22	4	7	3	10	6	6	4	3	1	1	6	9	10	11	6	12	2
	Males	343	26	17	39	25	30	29	37	37	21	24	21		194	25	9	12	10	14	9	12	4	12	10	8	2	5	7	3	4	3	
	Females	190	15	10	23	20	17	11	16	19	17	13	16	13		106	14	5	7	4	8	4	7	4	8	7	6	1	1	6		1	1
	Totals	153	11	7	16	5	13	18	21	18	20	8	8	8	88	11	4	5	6	6	5	5		4	3	2	1	4	1	3	3	2	

TABLE 61.—CONTINUED.—Deaths by Counties, by Sex, by Months, and by Age, 1888.

Counties.	Sex.	Year, 1888.	Months, 1888.												Ages in Periods of Years, 1888.																			
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.	Under 5.	5 to 10.	10 to 15.	15 to 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80.	80 and over.	Unknown.	
Huron.	Totals.....	202	9	18	21	11	23	17	15	20	20	20	13	15	...	98	11	8	12	13	8	4	3	1	4	5	3	8	7	9	7	5	1	
	Males.....	91	3	7	9	8	8	4	9	8	12	8	7	8	...	45	6	1	5	2	2	2	1	1	2	4	2	2	3	4	5	4		
	Females.....	111	6	11	12	3	15	13	6	12	8	12	6	7	...	43	5	7	7	11	6	2	2	---	2	1	1	6	4	5	2	1		
Ingham.	Totals.....	408	13	32	42	47	86	25	43	38	39	33	20	33	2	102	15	13	21	18	17	11	16	13	13	15	22	19	34	24	18	24	3	
	Males.....	212	9	18	18	26	19	14	26	20	22	16	9	15	1	53	6	12	11	6	8	4	8	7	6	8	12	11	21	11	13	15		
	Females.....	196	4	14	24	22	17	11	22	18	17	17	11	18	1	49	9	6	10	12	9	7	8	6	12	7	10	8	13	13	5	9	3	
Ionia.	Totals.....	226	14	18	19	19	20	16	13	21	22	20	23	20	1	46	4	4	12	9	6	13	11	6	5	10	11	16	21	13	12	21	1	
	Males.....	108	6	6	11	9	7	10	10	9	12	10	6	11	1	23	3	3	5	4	1	4	3	2	5	7	9	7	11	6	11	1		
	Females.....	118	8	12	8	10	13	6	3	12	10	10	17	9	---	23	1	1	7	5	5	9	8	3	3	5	4	7	14	7	6	10		
Iosco.	Totals.....	141	12	7	9	16	17	12	9	19	8	14	9	9	---	80	5	6	10	5	9	1	1	3	3	3	8	1	2	5	1	3	---	
	Males.....	89	7	3	5	7	11	7	7	13	5	11	8	5	---	43	2	4	7	2	8	---	1	1	3	2	2	1	2	3	1	2	---	
	Females.....	52	5	4	4	9	6	5	2	6	3	3	1	4	---	32	3	2	3	3	1	1	---	2	---	1	1	---	---	---	---	---	---	
Iron.	Totals.....	23	2	2	2	---	3	4	2	2	3	2	---	3	---	14	---	1	2	1	1	---	1	1	---	---	---	---	---	---	---	---	---	---
	Males.....	15	---	---	---	---	3	2	1	1	1	1	---	3	---	7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Females.....	8	2	1	---	---	---	2	1	1	---	1	---	---	---	7	---	1	---	---	---	---	1	1	---	---	---	---	---	---	---	---	---	---
Isabella.	Totals.....	130	7	14	12	15	14	10	13	17	20	18	20	20	---	78	9	4	10	13	4	4	7	5	1	5	7	3	5	5	5	10		
	Males.....	91	2	7	7	8	7	8	7	8	9	8	9	11	---	42	6	2	4	4	1	2	1	2	---	1	3	5	2	5	3	4	4	
	Females.....	39	5	7	5	7	7	2	6	9	11	10	11	9	---	36	3	2	6	9	3	2	6	3	1	4	2	2	1	---	2	1	6	---
Jackson.	Totals.....	396	26	23	26	33	40	22	30	47	40	33	25	32	3	102	26	16	14	21	10	6	12	12	17	10	18	22	18	19	34	31	8	
	Males.....	200	14	15	11	21	23	10	15	13	19	18	13	20	3	57	13	7	4	9	5	3	2	4	9	4	8	13	14	9	13	16	5	
	Females.....	196	12	13	15	13	17	12	15	29	21	20	12	12	---	45	13	9	10	12	5	3	10	8	6	10	9	4	10	16	15	3		

DEATHS—BY COUNTIES, BY SEX, BY MONTHS, BY AGE.

127

Kalamazoo.	Totals.....	392	19	27	87	44	29	32	28	44	37	27	25	41	2	105	7	6	17	15	12	21	11	18	40	24	12	22	24	29	17	38
	Males.....	231	12	11	22	24	16	20	19	28	20	16	19	24	--	63	6	4	9	6	4	9	7	14	7	9	8	17	15	16	13	22
	Females.....	161	7	16	15	20	13	12	9	16	17	11	6	17	2	42	1	2	8	9	8	12	4	4	3	15	4	5	9	13	4	16
Kalkaska.	Totals.....	42	4	4	3	8	5	2	4	3	2	4	4	4	--	20	2	4	2	2	2	1	2	1	--	3	--	1	2	--	--	
	Males.....	22	1	1	2	1	4	2	3	--	--	--	3	2	3	--	9	1	1	2	1	1	1	--	3	--	1	--	1	--	--	
	Females.....	20	3	3	1	2	1	--	--	1	3	2	1	2	1	--	11	1	3	--	1	1	1	--	--	--	--	--	1	--	--	--
Kent.	Totals.....	1,004	73	63	85	84	78	85	89	87	84	74	82	119	1	350	28	22	45	44	39	35	51	35	39	29	45	30	54	40	45	53
	Males.....	532	41	31	47	37	41	52	48	50	47	34	42	62	--	184	15	9	18	19	17	14	21	19	18	18	29	21	36	35	23	32
	Females.....	472	32	32	38	47	37	33	41	37	37	40	40	57	1	166	13	13	27	25	22	21	30	16	21	11	16	9	18	14	22	21
Keweenaw.	Totals.....	50	4	5	7	1	1	3	3	6	6	5	2	7	--	34	--	2	--	2	1	1	3	--	1	--	1	1	2	1	1	--
	Males.....	34	1	3	5	--	1	3	3	4	4	3	2	5	--	23	--	1	--	2	1	1	3	--	1	--	--	--	1	--	1	--
	Females.....	16	3	2	2	1	--	--	--	2	2	2	--	2	--	11	--	1	--	--	--	--	--	--	--	--	--	--	1	1	1	--
Lake.	Totals.....	37	4	2	3	4	1	2	1	3	2	3	4	4	4	12	3	1	3	2	3	--	1	1	1	1	1	1	1	2	--	3
	Males.....	18	3	1	2	1	--	--	--	1	1	2	1	3	2	4	1	1	--	1	--	2	--	1	--	1	--	1	1	1	2	--
	Females.....	19	1	1	1	3	1	2	--	2	1	1	3	1	2	8	2	--	2	2	1	--	1	--	1	--	--	--	1	1	--	3
Lapeer.	Totals.....	245	10	22	19	22	14	21	19	20	22	25	21	28	1	70	16	9	8	14	9	6	9	8	6	5	11	16	16	13	15	12
	Males.....	117	1	13	3	13	8	10	8	11	8	13	9	15	--	33	8	4	4	3	5	3	4	2	3	3	5	9	10	7	7	6
	Females.....	124	6	10	10	9	6	11	11	9	14	12	12	13	1	33	8	5	4	11	4	3	5	6	3	2	6	7	6	6	8	1
Leelanaw.	Unknown.....	4	3	--	1	--	--	--	--	--	--	--	--	--	--	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Totals.....	104	6	8	5	12	10	10	15	7	13	12	4	2	--	54	5	2	4	7	4	3	1	2	3	1	3	3	4	3	1	4
	Males.....	54	1	3	5	6	3	5	6	5	7	9	3	1	--	29	3	--	1	2	2	1	--	1	3	1	1	2	3	3	--	2
Lenawee.	Females.....	50	5	--	--	6	7	5	9	2	6	3	1	1	--	25	2	2	3	3	5	2	2	1	--	--	--	2	1	1	--	1
	Totals.....	450	25	35	50	45	37	37	33	33	47	25	36	46	1	77	10	10	12	22	13	16	18	20	17	17	26	30	34	37	40	54
	Males.....	238	9	22	22	23	19	23	16	16	24	14	21	28	1	39	4	4	6	7	4	6	8	7	11	10	17	11	22	26	25	27
Unknown.....	210	16	12	28	22	13	14	17	17	23	11	15	17	--	36	6	6	6	15	9	10	10	13	6	7	9	9	12	11	15	27	
	2	--	1	--	--	--	--	--	--	--	--	--	--	1	--	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3

Marquette	Totals	469	27	18	27	34	47	39	45	63	55	34	35	45	288	15	4	16	27	21	14	10	11	14	7	7	8	6	4	5	12		
	Males	269	14	11	20	21	27	23	28	30	35	19	20	26	156	8	1	11	17	16	13	6	8	9	5	5	3	3	5	1	2	5	
	Females	200	13	7	7	13	20	16	22	33	20	15	15	19	132	7	3	5	10	5	1	4	3	5	2	4	5	1	3	3	7		
Mason	Totals	115	2	6	4	9	8	13	6	13	10	13	9	21	58	4	7	7	7	7	2	5	3	2	3	2	3	2	1	6	5	3	
	Males	59	2	3	3	5	2	9	2	6	4	3	6	13	32	1	3	4	4	4	2	5	1	1	1	1	1	1	1	4	1	3	
	Females	56	—	3	1	4	6	4	4	7	6	10	3	8	26	3	4	3	3	—	—	5	2	1	2	—	—	—	—	—	—	—	
Mecosta	Totals	153	12	10	9	10	13	8	11	7	9	19	21	24	49	6	1	6	10	11	10	9	6	7	2	4	6	5	8	4	6	6	
	Males	94	9	5	5	6	8	7	7	5	6	8	13	15	31	4	—	1	6	8	7	7	3	3	2	3	5	2	4	2	1	5	
	Females	59	3	5	4	4	5	1	4	2	3	11	8	9	18	2	1	5	4	3	3	2	3	4	—	—	1	1	3	4	1	3	1
Menominee	Totals	308	22	19	21	15	27	20	29	27	38	24	29	35	2	186	11	3	8	8	11	11	7	12	8	5	3	5	2	6	4	7	7
	Males	175	14	13	13	8	17	14	14	14	18	15	15	18	2	100	3	2	6	4	8	7	4	5	9	7	1	1	3	1	4	3	7
	Females	133	8	6	8	7	10	6	15	13	20	9	14	17	86	8	1	2	4	3	4	7	2	3	1	4	2	2	1	2	1	—	—
Midland	Totals	90	3	5	10	8	4	1	5	17	9	9	6	13	43	2	4	7	1	2	2	2	1	3	6	1	1	4	4	2	3	2	
	Males	50	1	1	3	2	2	1	3	13	7	6	4	7	26	1	1	4	—	1	—	1	1	2	5	1	1	2	2	1	—	—	
	Females	40	2	4	7	6	2	—	2	4	2	3	2	6	17	1	3	3	1	1	2	1	—	1	1	—	—	—	—	—	—	—	—
Missaukee	Totals	32	—	3	1	1	6	4	1	3	2	5	2	4	16	2	4	2	2	2	2	2	2	1	1	1	—	—	—	—	—	—	—
	Males	16	—	2	1	—	2	3	1	2	—	2	1	2	9	2	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Females	16	—	1	—	1	4	1	—	1	2	3	1	2	7	—	2	2	2	1	2	—	1	1	—	—	—	—	—	—	—	—	—
Monroe	Totals	320	20	28	38	27	26	20	18	35	36	26	25	20	1	96	15	11	15	20	13	6	11	8	12	11	7	16	20	21	14	22	2
	Males	157	10	14	21	13	11	12	6	19	18	14	10	9	45	6	5	7	11	6	1	5	5	7	3	2	8	10	13	8	14	1	—
	Females	162	10	14	17	14	15	8	12	16	18	12	14	11	1	50	9	6	8	9	7	5	6	3	5	8	5	8	10	8	6	1	—
Montcalm	Unknown	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Totals	232	9	24	16	24	26	24	19	20	19	15	20	13	1	83	5	2	12	11	11	7	17	11	8	7	10	8	13	9	10	7	1
	Males	113	2	13	10	13	14	12	7	8	7	8	13	6	43	1	2	4	8	3	3	8	3	3	3	3	6	4	9	4	8	1	—
Montmorency	Females	119	7	13	6	11	12	12	12	12	12	7	7	7	1	40	4	—	8	3	8	4	9	8	5	4	4	4	4	5	2	6	1
	Totals	7	1	2	—	—	—	—	—	—	—	—	—	—	3	1	—	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—
	Males	5	—	2	—	—	—	—	—	—	—	—	—	—	2	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Females	2	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

TABLE 61.—CONTINUED.—Deaths by Counties, by Sex, by Months, and by Age, 1888.

Counties.	Sex.	Year, 1888.	Months, 1888.												Ages in Periods of Years, 1888.																				
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.	Under 5.	5 to 10.	10 to 15.	15 to 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80.	80 and over.	Unknown.		
Muskegon	Totals	461	33	32	33	32	41	33	36	51	36	41	36	56	1	258	23	13	14	14	16	11	10	11	12	12	15	10	7	11	10	11	3		
	Males	257	17	17	21	23	25	19	19	32	21	21	16	26	1	153	9	7	8	5	11	8	4	7	6	8	8	4	1	4	6	5	3		
	Females	204	16	15	12	10	16	14	17	19	15	20	20	30	..	105	14	6	6	9	5	3	6	4	6	4	7	6	6	7	4	6	..		
Newaygo	Totals	112	7	8	9	8	12	3	7	12	8	14	12	12	..	34	6	2	6	5	6	5	3	6	3	3	6	2	6	6	5	3	5		
	Males	66	6	8	6	4	5	2	6	6	5	8	9	6	..	16	6	2	4	2	2	2	1	3	3	2	3	1	4	5	2	4			
	Females	46	1	5	3	4	7	1	1	6	3	6	3	6	18	..	..	..	..	..	..	..	..	..	..	1	3	1	2	..	1	1		
Oakland	Totals	382	29	31	28	36	31	30	30	36	36	32	27	36	..	65	11	8	12	21	11	19	13	12	20	21	15	13	25	28	41	38	8		
	Males	207	19	18	11	22	16	20	13	16	14	19	20	19	..	33	6	3	5	9	8	7	5	7	13	13	6	13	13	25	25	5			
	Females	175	10	13	17	14	15	10	17	20	22	13	7	17	..	32	5	5	7	12	3	12	8	5	7	8	9	7	13	10	16	13	3		
Oceana	Totals	95	5	2	11	11	4	7	10	9	10	9	7	10	..	30	5	6	4	3	2	5	9	1	3	2	3	3	4	8	5	2	..		
	Males	54	2	2	5	7	2	5	3	6	5	6	4	7	..	16	3	4	1	1	1	3	6	1	1	1	2	4	4	4	2	..			
	Females	41	3	..	6	4	2	2	7	3	5	3	3	3	..	14	2	2	3	2	1	2	3	..	2	2	2	1	..	..	..	..	..
Ogenaw	Totals	32	1	5	2	3	1	6	6	3	3	1	1	..	..	14	3	3	2	1	2	2	1	..	..	..	..	..	..	..	..	..	1	
	Males	16	..	3	1	..	1	3	3	2	2	1	..	..	..	8	1	2	1	1	1	1	..	..	..	..	..	..	..	..	..	..	..
	Females	16	1	2	1	3	..	3	3	1	1	..	1	6	2	1	1	1	1	1	1	
Ontonagon	Totals	23	1	1	3	1	2	3	2	1	1	4	2	2	..	10	3	1	1	1	1	1	1	1	1	1	3	1	1	1	1	1	1		
	Males	13	1	3	1	2	1	2	1	2	1	..	2	8	2	2	
	Females	10	1	2	..	1	..	4	..	2	..	2	1	1	1	1	1	1	1	1
Osceola	Totals	120	6	7	8	22	8	5	8	7	8	15	10	15	1	48	5	2	6	6	2	6	4	8	3	2	1	8	3	6	7	1	3		
	Males	64	4	4	5	12	3	2	4	3	4	12	5	6	..	28	4	1	2	2	2	3	3	4	3	1	2	2	2	4	1	
	Females	56	2	3	3	10	5	3	4	4	4	3	5	9	1	20	1	1	4	4	..	3	1	4	2	6	1	3	3

DEATHS—BY COUNTIES, BY SEX, BY MONTHS, BY AGE.

[illegible]

TABLE 61.—CONTINUED.—Deaths by Counties, by Sex, by Months, and by Age, 1888.

County.	Sex.	Year, 1888.	Months, 1888.												Ages in Periods of Years, 1888.																				
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.	Under 5.	5 to 10.	10 to 15.	15 to 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80.	80 and over.	Unknown.		
Shiawassee	Totals	182	5	9	14	20	11	18	15	16	18	24	10	20	2	46	11	5	7	4	2	4	5	6	8	8	6	13	12	13	13	13	7		
	Males	94	2	5	8	9	2	10	8	9	9	18	4	9	1	23	4	3	3	3	2	3	2	4	4	3	7	9	7	7	7	9	3		
	Females	88	3	4	6	11	9	8	7	7	9	6	6	11	1	23	7	1	4	4	2	2	2	4	4	4	3	6	3	6	5	4	4		
St. Clair	Totals	482	25	41	43	31	30	32	40	56	48	44	44	46	2	163	26	10	17	28	29	13	8	17	13	16	22	22	26	32	23	4	4		
	Males	260	9	21	22	16	15	18	25	29	26	27	28	23	1	95	13	3	7	15	12	7	6	8	9	6	8	15	13	13	18	11	1		
	Females	222	16	20	21	15	15	14	15	27	22	17	16	23	1	68	13	7	10	13	17	6	2	9	4	7	8	7	9	13	14	12	3		
St. Joseph	Totals	838	17	41	54	31	25	24	15	34	32	21	16	28	..	59	20	3	13	14	18	8	17	12	15	14	6	24	26	25	29	35	..		
	Males	173	9	18	23	18	15	14	10	15	16	9	10	11	..	36	9	2	7	5	6	4	6	4	6	7	4	15	13	15	16	18	..		
	Females	165	8	23	36	13	10	10	5	19	16	12	6	17	..	23	11	1	6	9	12	4	11	8	9	7	2	9	13	10	13	17	..		
Tuscola	Totals	317	13	22	24	24	30	20	30	32	28	29	40	1	89	25	16	11	18	12	14	15	9	6	9	11	11	11	15	5	11	29			
	Males	158	9	12	12	6	14	16	10	12	13	16	14	23	1	43	13	8	5	10	2	3	7	4	3	4	6	7	8	11	4	6	14		
	Females	159	4	10	12	18	10	14	10	18	19	12	15	17	..	46	12	8	6	8	10	11	8	5	3	5	5	4	3	4	1	5	15		
Van Buren	Totals	343	19	40	32	37	33	19	19	35	30	26	19	33	1	94	8	7	14	12	12	4	9	14	10	18	13	25	22	13	29	31	7		
	Males	166	10	19	16	22	17	9	7	14	17	11	5	19	..	52	3	4	5	4	5	2	5	6	7	3	14	19	9	18	12	5			
	Females	177	9	21	16	15	16	10	12	21	13	15	14	14	1	42	5	3	9	8	8	2	7	9	4	11	10	11	12	4	11	19	2		
Washtenaw	Totals	411	32	36	53	38	37	31	32	39	24	32	21	45	..	80	11	9	17	21	12	7	16	19	16	16	20	24	30	35	33	10			
	Males	205	13	15	27	19	17	17	19	18	8	15	12	25	..	41	4	5	10	9	7	3	6	9	9	6	10	10	18	20	16	16	6		
	Females	206	19	21	26	19	20	14	13	12	16	17	9	20	..	39	7	4	7	12	5	4	10	10	7	10	10	14	12	15	19	17	4		

Wayne	Totals.....	5,301	436	387	468	426	457	375	482	519	441	427	385	457	11	2568	248	125	183	182	217	163	200	176	171	133	132	174	162	166	113	141	47
	Males.....	2,559	247	214	250	233	264	220	268	296	252	232	218	270	5	1411	132	50	96	100	112	92	121	100	114	85	88	108	97	93	64	76	30
	Females....	2,337	189	171	218	198	192	155	223	223	189	195	167	216	6	1152	116	75	87	82	105	71	79	76	57	48	49	71	65	73	49	65	17
	Unknown.....	5	.....	2	.....	.....	1	.....	1	.....	.....	.....	.....	1	..	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wexford	Totals.....	89	12	7	3	16	7	8	8	5	7	4	5	10	2	38	4	3	2	6	5	2	4	3	1	2	7	4	3	1	1	3	.....
	Males.....	46	6	3	2	9	3	6	1	1	5	1	3	6	..	22	1	2	.....	3	3	.....	1	3	1	1	3	3	1	1	.....	1	.....
	Females....	43	6	4	1	7	4	2	2	4	2	3	2	4	2	16	3	1	2	3	2	2	3	.....	.....	1	4	1	2	.....	1	2	.....

COLOR OF DECEDENTS IN MICHIGAN IN 1888.

Certain facts of interest concerning the color of decedents in Michigan in 1888 may be found in Tables 62 and 63. The number and proportion of deaths among the white inhabitants may be compared with that of the black, mulatto and indian. By an examination of the last column of the table it will be seen that the death-rate is less than the average for all colors among the white and mulatto inhabitants and greater than the average among the blacks and indians. The proportion of males was greatest among the blacks and indians and least among the mulatto inhabitants.

Table 63 permits a study of the details respecting color of decedents in 1888 in each county of the State.

TABLE 62.—Deaths Returned for the Year 1888, Distinguishing the Color by Number and Proportion of each Sex, and by Sex, the Per Cent of Decedents of each Color to Total of all Colors, and the Per Cent of Decedents to Inhabitants.

Color.	Sex.	Population, June 1, 1884.	Number of deaths returned.	Per cent of deaths of each sex to total of both sexes.	Males to 100 females.	Per cent of deaths of each color to total of all colors, by sex.	Per cent of inhab- itants of each color to total of all colors, by sex, June 1, 1884.	Death-rate. Per cent of deaths in 1888 to Population in 1884.
All colors.....	Totals.....	a 1,845,778	21,764	-----	-----	100.00	100.00	1.18
	Males.....	969,803	11,722	53.90	117	100.00	100.00	1.21
	Females.....	875,769	10,024	46.10	-----	100.00	100.00	1.14
	Unknown.....	206	18	-----	-----	-----	-----	-----
White.....	Totals.....	1,822,752	21,369	-----	-----	98.19	98.75	1.17
	Males.....	957,889	11,512	53.89	117	98.21	98.77	1.20
	Females.....	864,903	9,880	46.11	-----	98.26	98.76	1.14
	Unknown.....	10	7	-----	-----	-----	-----	-----
Black.....	Totals.....	6,854	163	-----	-----	.75	.37	2.38
	Males.....	3,690	93	57.06	133	.79	.38	2.52
	Females.....	3,164	70	42.94	-----	.70	.36	2.21
Mulatto.....	Totals.....	8,258	71	-----	-----	.33	.45	.86
	Males.....	4,202	35	49.30	97	.30	.43	.88
	Females.....	4,056	36	50.70	-----	.36	.46	.89
Indian.....	Totals.....	6,808	150	-----	-----	.89	.37	2.20
	Males.....	3,525	82	54.67	121	.70	.36	2.33
	Females.....	3,278	68	45.33	-----	.68	.37	2.07
Unknown.....	Totals.....	1,041	11	-----	-----	-----	.06	1.06
	Males.....	477	-----	-----	-----	-----	.05	-----
	Females.....	368	-----	-----	-----	-----	.04	-----
	Unknown.....	196	11	-----	-----	-----	-----	-----
Black and mulatto	Totals.....	15,112	234	-----	-----	1.08	.82	1.55
	Males.....	7,892	128	54.70	121	1.09	.81	1.62
	Females.....	7,220	106	45.30	-----	1.06	.82	1.47

a Includes 70 Asiatic males.

135

State and Counties.	All Colors, 1888.				White.				Black.			Mulatto.			Indian.			Unknown.			
	Totals.	Males.	Females.	Unknown.	Totals.	Males.	Females.	Unknown.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Unknown.
State	21,764	11,722	10,024	18	21,369	11,512	9,850	7	163	93	70	71	35	36	150	82	68	11			11
Alcona	28	17	11		28	17	11														
Alger	15	5	10		15	5	10														
Allegan	423	220	203		421	219	202					2	1	1							
Alpena	117	70	47		117	70	47														
Antrim	76	39	37		76	39	37														
Arenac	48	31	17		48	31	17														
Baraga	46	28	18		45	28	17								1		1				
Barry	177	92	85		177	92	85														
Bay	481	263	218		479	261	218		1	1					1	1					
Benzie	52	31	21		52	31	21														
Berrien	335	166	169		332	165	167		2		2	1	1								
Branch	255	128	127		255	128	127														
Calhoun	384	189	195		377	188	189		2	1	1	5		5							
Cass	172	92	80		160	86	74		8	5	3	3	1	2	1		1				
Charlevoix	48	20	28		40	16	24								8	4	4				
Cheboygan	103	49	54		98	48	50		1		1				4	1	3				
Chippewa	63	36	27		55	29	26								8	7	1				
Clare	79	33	46		79	33	46														
Clinton	237	116	121		235	115	120					2	1	1							
Crawford	7	4	3		7	4	3														
Delta	165	101	64		162	99	63					1	1		2	1	1				
Eaton	296	160	136		296	160	136														
Emmet	96	50	46		61	30	31		1		1				34	20	14				
Genesee	270	126	143	1	266	125	141		2	1	1	1		1				1			1
Gladwin	14	4	10		14	4	10														
Gogebic	168	107	61		168	107	61														
Gr'nd Traverse	131	70	61		130	70	60		1		1										
Gratiot	168	86	82		166	86	80					1		1	1		1				
Hillsdale	259	136	123		256	136	122														

Counties.	All Colors, 1888.				White.				Black.			Mulatto.			Indian.			Unknown.			
	Totals.	Males.	Females.	Unknown.	Totals.	Males.	Females.	Unknown.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Unknown.
Ingham	408	212	196	--	403	209	194	--	5	3	2	--	--	--	--	--	--	--	--	--	--
Ionia	226	108	118	--	226	108	118	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iosco	141	89	52	--	141	89	52	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	23	15	8	--	23	15	8	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isabella	180	91	89	--	165	82	83	--	--	--	--	--	--	--	15	9	6	--	--	--	--
Jackson	396	200	196	--	392	199	193	--	4	1	3	--	--	--	--	--	--	--	--	--	--
Kalamazoo	392	231	161	--	381	223	158	--	7	4	3	4	4	--	--	--	--	--	--	--	--
Kalkaska	42	22	20	--	42	22	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Kent	1,004	532	472	--	994	527	467	--	7	4	3	3	1	2	--	--	--	--	--	--	--
Keweenaw	50	34	16	--	50	34	16	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lake	37	18	19	--	36	17	19	--	--	--	--	--	--	--	1	1	--	--	--	--	--
Lapeer	245	117	124	4	242	117	122	3	2	--	2	--	--	--	--	--	--	1	--	--	1
Leelanaw	104	54	50	--	68	37	31	--	--	--	--	--	--	--	36	17	19	--	--	--	--
Lenawee	450	238	210	2	441	232	208	1	6	6	--	2	--	2	--	--	--	1	--	--	1
Livingston	151	84	67	--	151	84	67	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Luce	5	5	--	--	5	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mackinac	44	25	18	1	33	18	14	1	--	--	--	--	--	--	11	7	4	--	--	--	--
Macomb	324	182	142	--	322	180	142	--	1	1	--	1	1	--	--	--	--	--	--	--	--
Manistee	230	142	88	--	225	138	87	--	5	4	1	--	--	--	--	--	--	--	--	--	--
Manitou	4	2	2	--	3	2	1	--	--	--	--	--	--	--	1	--	1	--	--	--	--
Marquette	469	269	200	--	469	269	200	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mason	115	59	56	--	108	54	54	--	--	--	--	--	--	--	7	5	2	--	--	--	--
Mecosta	153	94	59	--	152	94	58	--	1	--	1	--	--	--	--	--	--	--	--	--	--
Menominee	308	175	133	--	300	172	128	--	--	--	--	--	--	--	8	3	5	--	--	--	--
Midland	90	50	40	--	90	50	40	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Missaukee	32	16	16	--	32	16	16	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Monroe	320	157	162	1	319	157	161	1	1	--	1	--	--	--	--	--	--	--	--	--	--
Montcalm	232	118	119	--	230	113	117	--	1	--	1	1	--	1	--	--	--	--	--	--	--
Montmorency	7	5	2	--	7	5	2	--	--	--	--	--									

DEATHS—BY COUNTIES, BY COLOR, BY SEX.

137

TABLE 63.—CONTINUED.—*Deaths by Counties, by Color, by Sex.*

Counties.	All Colors, 1888.				White.				Black.			Mulatto.			Indian.			Unknown.			
	Totals.	Males.	Females.	Unknown.	Totals.	Males.	Females.	Unknown.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Unknown.
Oscoda.....	4	2	2		4	2	2														
Otsego.....	19	11	8		19	11	8														
Ottawa.....	341	180	161		341	180	161														
Presque Isle...	89	18	19	2	37	18	19											2			2
Roscommon.....	18	12	6		18	12	6														
Saginaw.....	916	499	416	1	907	494	413		2	1	1	2	1	1	4	3	1	1			1
Sanilac.....	268	154	114		268	154	114														
Schoolcraft.....	31	19	11	1	29	19	9	1							2		2				
Shiawassee.....	182	94	88		182	94	88														
St. Clair.....	482	260	222		481	260	221		1		1										
St. Joseph.....	338	173	165		335	172	163		2	1	1	1		1							
Tuscola.....	317	158	159		315	156	159								2		2				
Van Buren.....	343	166	177		334	159	175		4	3	1	5	4	1							
Washtenaw.....	411	205	206		410	204	206		1	1											
Wayne.....	5,301	2,959	2,337	5	5,171	2,888	2,288		89	52	37	35	18	17	1	1		5			5
Wexford.....	89	46	43		89	46	43														

DEATHS OF NATIVE AND FOREIGN BORN INHABITANTS.

An examination of Table 64 will show the nativity of decedents in Michigan for each of the years 1886-1888, and the average for ten years ending with 1887. The per cent of native-born decedents is seen to be a little greater for 1888 than in 1887, but is 2.90 per cent less than the ten-year average. The foreign-born are a little less for 1888 than in 1887, but 1.55 per cent greater than the average. The per cent of unknown nativity was unusually large in 1888, being 1.35 per cent above the average.

Table 65 shows the population in 1884, the deaths in 1888 by nativity, sex, periods of age, and the death-rate, or number of deaths to each hundred of population. As usual, the death-rate is seen to be greater for the native-born than for the foreign-born and also greater than the total for all nativities. This excess among the native-born is more noticeable in the period under five than in any other, but in the more advanced ages the death-rate is seen to be more nearly equal, and is often greater among the foreign-born. It seems scarcely necessary to repeat the observation that native-born decedents contain a large element of strictly foreign people, and also that a very large proportion of the deaths of infants and children is included among the native-born.

Table 66 continues the subject of nativity and exhibits details by number and sex for the State and counties.

TABLE 64.—*Nativity of Decedents in Michigan for the years 1886-1888, and the Average for ten years, 1878-1887.*

Nativity of Decedents.	Deaths, 1886.		Deaths, 1887.		Deaths, 1888.		Average for 10 years, ending with 1887.	
	Number.	Per cent of Total.	Number.	Per cent of Total.	Number.	Per cent of Total.	Number.	Per cent of Total.
All nativities.....	18,187	100.00	19,482	100.00	21,764	100.00	16,822	100.00
Native-born.....	14,079	77.41	14,556	74.72	16,328	75.02	13,108	77.92
Foreign-born.....	3,587	19.45	4,187	21.49	4,501	20.68	3,218	19.13
Unknown.....	571	3.14	739	3.79	935	4.30	496	2.95

TABLE 65.—By Nativity, Sex, and Periods of Age, the Population in 1884, the Number of Deaths in 1888, and the Per Cent of Deaths to Inhabitants.

Ages in Years and Periods.	Inhabitants of Michigan, June 1, 1884.						Deaths in Michigan in 1888.						Death-rate; Number of Deaths to 100 living.					
	All Nativities.			Native.			Foreign.			All Nativities.			Native.			Foreign.		
	Males.		Females.	Males.		Females.	Males.		Females.	Males.		Females.	Males.		Females.	Males.		Females.
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Totals.....	974,424	879,028	695,490	652,145	272,398	214,669				11,722	10,024	8,640	7,670	2,542	1,959			
Under 5.....	114,852	111,116	108,681	105,166	5,972	5,763				4,699	3,763	4,529	3,606	81	72			
5 to 10.....	110,263	107,363	96,908	94,682	13,126	12,491				454	427	397	393	51	29			
10 to 15.....	99,721	96,508	86,116	83,467	13,373	12,558				297	296	230	259	31	28			
15 to 20.....	92,033	91,010	72,783	72,803	18,910	17,997				402	430	305	358	63	64			
20 to 30.....	190,217	163,177	123,786	115,746	65,028	46,937				881	973	550	686	273	243			
30 to 40.....	139,332	116,333	80,547	74,032	57,399	41,981				717	757	393	462	284	293			
40 to 50.....	97,331	85,898	53,408	52,016	43,354	33,674				798	690	357	342	326	227			
50 to 60.....	68,020	56,521	37,026	32,813	30,651	23,550				732	632	325	351	355	245			
60 to 70.....	40,743	33,149	23,640	19,918	16,899	13,139				1,086	757	506	394	467	309			
70 to 80.....	16,772	13,949	10,801	9,000	5,885	4,899				1,049	787	632	451	368	298			
80 and over.....	4,034	3,659	2,617	2,377	1,369	1,293				593	479	343	292	185	163			
Unknown ages.....	1,106	850	182	125	272	117				184	121	73	67	98	18			

TABLE 66.—*Exhibiting by Number and by sex, for the State and Counties, the Nativity of Decedents returned for the year 1888.*

State and counties.	All Nativities, 1888.				Native.				Foreign.				Unknown.			
	Totals.	Males.	Females.	Unknown.	Totals.	Males.	Females.	Unknown.	Totals.	Males.	Females.	Unknown.	Totals.	Males.	Females.	Unknown.
State	21,764	11,722	10,024	18	16,323	8,640	7,670	18	4,501	2,542	1,959		935	540	395	
Alcona.....	28	17	11		16	8	8		8	7	1		4	2	2	
Alger.....	15	5	10		12	4	8		2	1	1		1		1	
Allegan.....	423	220	203		331	172	159		82	44	38		10	4	6	
Alpena.....	117	70	47		105	62	43		11	7	4		1	1		
Antrim.....	76	39	37		60	31	29		15	7	8		1	1		
Arenac.....	48	31	17		35	25	10		12	5	7		1	1		
Baraga.....	46	28	18		23	12	11		13	7	6		10	9	1	
Barry.....	177	92	85		150	75	75		22	13	9		5	4	1	
Bay.....	481	263	218		363	196	167		114	64	50		4	3	1	
Benzie.....	52	31	21		42	24	18		7	6	1		3	1	2	
Berrien.....	335	166	169		290	141	149		38	23	15		7	2	5	
Branch.....	255	128	127		227	111	116		18	11	7		10	6	4	
Calhoun.....	384	189	195		302	154	148		65	30	35		17	5	12	
Cass.....	172	92	80		145	73	72		19	14	5		8	5	3	
Charlevoix.....	48	20	28		37	17	20		11	3	8					
Cheboygan.....	103	49	54		86	39	47		18	10	8					
Chippewa.....	63	36	27		41	23	18		20	12	8		1	1		
Clare.....	79	33	46		55	17	38		11	7	4		13	9	4	
Clinton.....	237	116	121		202	102	100		26	12	14		9	2	7	
Crawford.....	7	4	3		6	4	2		1		1					
Delta.....	165	101	64		113	59	54		50	40	10		2	2		
Eaton.....	296	160	136		263	136	127		21	15	6		12	9	3	
Emmet.....	96	50	46		80	43	37		13	5	8		3	2	1	
Genesee.....	270	128	143	1	215	101	113	1	42	17	25		13	8	5	
Gladwin.....	14	4	10		11	3	8		8	1	2					
Gogebic.....	168	107	61		100	57	43		31	23	8		37	27	10	
G'd Traverse.....	131	70	61		87	48	39		40	20	20		4	2	2	
Gratiot.....	168	86	82		150	77	73		14	8	6		4	1	3	
Hillsdale.....	259	136	123		230	118	112		16	10	6		13	8	5	
Houghton.....	343	190	153		268	147	121		73	43	30		2		2	
Huron.....	202	91	111		135	60	75		63	28	35		4	3	1	

TABLE 66.—CONTINUED.—*Deaths by Counties, by Nativity, by Sex.*

Counties.	All Nativities, 1888.				Native.				Foreign.				Unknown.			
	Totals.	Males.	Females.	Unknown.	Totals.	Males.	Females.	Unknown.	Totals.	Males.	Females.	Unknown.	Totals.	Males.	Females.	Unknown.
Ingham	408	212	196	---	341	176	165	---	57	33	24	---	10	3	7	---
Ionia	226	108	118	---	178	87	91	---	40	18	22	---	8	3	5	---
Iosco	141	89	52	---	103	61	42	---	36	27	9	---	2	1	1	---
Iron	23	15	8	---	18	11	7	---	5	4	1	---	---	---	---	---
Isabella	180	91	89	---	151	80	71	---	27	10	17	---	2	1	1	---
Jackson	396	200	196	---	320	162	158	---	55	26	29	---	21	12	9	---
Kalamazoo	392	231	161	---	305	182	123	---	81	45	36	---	6	4	2	---
Kalkaska	42	22	20	---	36	17	19	---	6	5	1	---	---	---	---	---
Kent	1,004	532	472	---	731	385	346	---	220	123	97	---	53	24	29	---
Keweenaw	50	34	16	---	40	28	12	---	10	6	4	---	---	---	---	---
Lake	37	18	19	---	29	14	15	---	5	2	3	---	3	2	1	---
Lapeer	245	117	124	4	192	89	99	4	50	26	24	---	3	2	1	---
Leelanaw	104	54	50	---	86	43	43	---	17	11	6	---	1	---	1	---
Lenawee	450	238	210	2	355	179	174	2	72	46	26	---	23	13	10	---
Livingston	151	84	67	---	117	65	52	---	32	18	14	---	2	1	1	---
Luce	5	5	---	---	2	2	---	---	3	3	---	---	---	---	---	---
Mackinac	44	25	18	1	33	20	12	1	7	2	5	---	4	3	1	---
Macomb	324	182	142	---	248	139	109	---	76	43	33	---	---	---	---	---
Manistee	230	142	88	---	180	117	63	---	49	24	25	---	1	1	---	---
Manitou	4	2	2	---	2	1	1	---	2	1	1	---	---	---	---	---
Marquette	469	269	200	---	325	175	150	---	144	94	50	---	---	---	---	---
Mason	115	59	56	---	90	47	43	---	24	11	13	---	1	1	---	---
Mecosta	153	94	59	---	107	60	47	---	45	34	11	---	1	---	1	---
Menominee	308	175	133	---	225	120	105	---	72	49	23	---	11	6	5	---
Midland	90	50	40	---	73	41	32	---	15	8	7	---	2	1	1	---
Missaukee	32	16	16	---	25	13	12	---	7	3	4	---	---	---	---	---
Monroe	320	157	162	1	249	114	134	1	64	38	26	---	7	5	2	---
Montcalm	232	113	119	---	198	92	106	---	29	18	11	---	5	3	2	---
Montmorency	7	5	2	---	6	4	2	---	1	1	---	---	---	---	---	---
Muskegon	461	257	204	---	353	197	156	---	107	59	48	---	1	1	---	---
Newaygo	112	66	46	---	87	50	37	---	19	11	8	---	6	5	1	---
Oakland	382	207	175	---	285	150	135	---	85	48	37	---	12	9	3	---
Oceana	95	54	41	---	80	43	37	---	14	10	4	---	1	1	---	---
Ogemaw	32	16	16	---	25	13	12	---	7	3	4	---	---	---	---	---
Ontonagon	23	13	10	---	15	10	5	---	8	3	5	---	---	---	---	---
Osceola	120	64	56	---	90	46	44	---	26	15	11	---	4	3	1	---

TABLE 66.—CONTINUED.—Deaths by Counties, by Nativity, by Sex.

Counties.	All Nativities, 1888.				Native.				Foreign.				Unknown.			
	Totals.	Males.	Females.	Unknown.	Totals.	Males.	Females.	Unknown.	Totals.	Males.	Females.	Unknown.	Totals.	Males.	Females.	Unknown.
Oscoda.....	4	2	2	---	2	---	2	---	---	---	---	---	2	2	---	---
Otsego.....	19	11	8	---	10	6	4	---	9	5	4	---	---	---	---	---
Ottawa.....	341	180	161	---	228	128	100	---	102	44	58	---	11	8	3	---
Presque Isle...	39	18	19	2	26	14	10	2	13	4	9	---	---	---	---	---
Roscommon...	18	12	6	---	11	9	2	---	6	2	4	---	1	1	---	---
Saginaw.....	916	499	416	1	655	358	296	1	227	123	104	---	34	18	16	---
Sanilac.....	268	154	114	---	162	95	67	---	104	57	47	---	2	2	---	---
Schoolcraft...	31	19	11	1	21	14	6	1	10	5	5	---	---	---	---	---
Shiawassee....	182	94	88	---	146	71	75	---	28	18	10	---	8	5	3	---
St. Clair.....	482	260	222	---	318	168	150	---	146	82	64	---	18	10	8	---
St. Joseph....	338	173	165	---	268	135	133	---	35	20	15	---	35	18	17	---
Tuscola.....	317	158	159	---	237	121	116	---	67	29	38	---	13	8	5	---
Van Buren....	343	166	177	---	307	147	160	---	27	15	12	---	9	4	5	---
Washtenaw....	411	205	206	---	273	132	141	---	93	52	41	---	45	21	24	---
Wayne.....	5,301	2,959	2,337	5	3,711	2,034	1,672	5	1,226	707	519	---	364	218	146	---
Wexford.....	89	46	43	---	73	36	37	---	12	8	4	---	4	2	2	---

CAUSES OF DEATH, 1888.

No more important and valuable statistics can be collected than those which relate to the diseases or causes of death in a community. For this reason, the best methods for obtaining such facts should elicit the earnest consideration of those upon whom devolves the duty of establishing these methods. Although the present law, relating to the registration of births, marriages and deaths in Michigan, might be greatly improved in order to become of most value to the people, still, much useful knowledge is obtained by the present system.

This is in many respects the most important part of the report, its object being to point out the locality in the State where certain diseases prevailed the most, what were the diseases that proved most fatal, at what ages they bore most heavily, at what seasons of the year they occurred, what were the surrounding circumstances, and how they compare with deaths in previous years. All these facts form an array of evidence from which reliable conclusions can be drawn for the benefit of the public health.

While the leading causes of death in Michigan are not absolutely peculiar to its own special area, there are certain diseases, more prominent than others that demand our most thoughtful consideration. These principal causes will now be taken up, classified and studied with reference to their effect upon the mortality-rate in the State.

By reference to Table 67, where the causes of death are arranged under the five general classes, it will be seen that the number of deaths, of which the causes were not returned in 1888, were 1,304, out of a total of 21,764. This number was 5.99 per cent of the total number reported as compared with 6.78 per cent in 1887, 6.12 per cent in 1886, 6.06 per cent in 1885, and 8.11 per cent in the average for ten years, 1878-1887. While this shows a marked improvement on the part of those whose duty it is to return the causes of death, it is still too high a proportion and might be greatly reduced if more care was exercised on the part of the registration officers.

The proportion of deaths from zymotic diseases was less in 1888 than for any year since 1885 and was 4.30 per cent less than the ten-year average. A low mortality-rate from the zymotic class is evidence of the absence of extensive epidemics and is a satisfactory guide as to the condition of the health of a community. Diseases of the zymotic class, while destroying more lives in Michigan in 1888 than in 1887, were nevertheless decreased in their percentage of mortality by more than two per cent. Table 69 shows some of the most prominent of these diseases.

The class of diseases called constitutional, of which consumption and cancer are the principal representatives, presented a slight increase in 1888 as compared with 1887, with regard to the percentage to deaths from all causes. It is about the same, however, as the ten-year average.

Local diseases, those affecting separate organs of the body as the brain and nervous system, are liable to marked fluctuations in their degree of fatality. These changes are influenced more by meteorological than by sanitary conditions, in which respect they are the reverse of the zymotic diseases. By reference to Table 68, it is seen that in 1888 the spring months and December had a larger proportion of the deaths.

The percentage of deaths from developmental diseases, those from old age and of infants, was more in 1888 than for either of the years 1887 or 1886 and was also greater than the average for the ten years, 1878-1887, by 3.92 per cent.

Deaths by violence were less in number and per cent in 1888 than they were in 1887,

and as compared with the average for ten years, 1878-1887, the proportion was also less. During 1888, 106 males and 7 females lost their lives by railroad accidents. Eighty-two males and 19 females committed suicide. One hundred and forty-seven males and 14 females were reported drowned. Twelve males and nine females were reported poisoned. Fifty-five persons were burned or scalded to death. Six from exposure; 32 from suffocation and strangulation; one from starvation; 14 from murder, and 364 from accidents of various kinds, compiled in Table 78 as "Casualty."

TABLE 67.—*Number of Deaths returned from all Causes, from each Class of Causes and the Per Cent of Deaths from each Class, to Deaths from all Causes, for the Years, 1886-1888, and the Average for Ten Years, 1878-1887.*

Causes of Death,—Classes.	1886.		1887.		1888.		Average for 10 Years, 1878-1887.	
	Number.	Per Cent of Total.	Number.	Per Cent of Total.	Number.	Per Cent of Total.	Number.	Per Cent of Total.
All causes.....	18,187	100.00	19,482	100.00	21,764	100.00	16,822	100.00
I.—Zymotic diseases.....	4,639	25.51	4,873	25.01	4,994	22.95	4,584	27.25
II.—Constitutional diseases.....	2,963	16.30	3,065	15.84	3,527	16.20	2,737	16.27
III.—Local diseases.....	5,570	30.62	6,034	30.97	6,956	31.96	4,872	28.96
IV.—Developmental diseases.....	2,979	16.38	3,125	16.04	3,950	18.15	2,393	14.23
V.—Violent deaths.....	923	5.07	1,044	5.36	1,033	4.75	872	5.18
Unknown and unclassified.....	1,113	6.12	1,321	6.78	1,304	5.99	1,364	8.11

Attention has been called, heretofore, to Table 68, where may be seen the months in 1888 in which the deaths from all causes and from each class of causes were most frequent.

TABLE 68.—*By Months, the number of Deaths returned in Michigan from all Causes and from each class of Causes during the year 1888.*

Causes of Death,—Classes.	Year, 1888.	Months of Death, 1888.												
		Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Unk.
All causes.....	21,764	1416	1585	1965	1909	1858	1627	1789	2169	1978	1848	1642	2012	66
I.—Zymotic diseases.....	4,994	267	277	337	359	342	325	468	732	601	526	351	399	10
II.—Constitutional diseases.....	3,527	223	259	329	305	330	268	294	319	279	309	319	283	10
III.—Local diseases.....	6,956	470	598	674	701	647	522	500	533	572	516	485	720	18
IV.—Developmental diseases.....	3,950	308	309	350	367	342	282	305	354	313	313	307	390	10
V.—Violent deaths.....	1,033	71	50	71	82	81	104	89	97	96	91	82	113	6
Unknown and unclassified.....	1,304	77	92	104	95	116	126	133	134	117	98	98	107	12

In Table 69 are presented some of the more prominent diseases of the zymotic class for a period of twelve years, 1877-1888. It appears that the total number of deaths from these diseases was less by 74 than that returned for the previous year. The diseases showing an increase in 1888 over the number in 1887, were whooping-cough, croup, measles, scarlet fever, and small-pox, while typhoid fever and diphtheria show a decrease. The deaths from measles were greater in 1888 than for any other year of the table and were greater than the average of the period by 244. It appears to have been unusually fatal in 1888.

TABLE 69.—Deaths in Michigan from some of the Prominent Zymotic Diseases during the Twelve Years 1877-1888, and the Average.

Years.	Diseases.						
	Typhoid fever.	Whooping-cough.	Croup.	Diphtheria.	Measles.	Scarlet fever.	Small-pox.
1877.....	446	131	164	593	62	404	102
1878.....	329	132	236	887	16	429	6
1879.....	397	162	278	1,473	167	418	6
1880.....	513	264	322	1,542	125	370	3
1881.....	884	142	380	2,063	256	383	82
1882.....	463	86	349	1,416	150	592	100
1883.....	439	92	336	1,007	253	673	5
1884.....	514	160	325	1,065	144	326	3
1885.....	387	138	337	1,054	38	245	3
1886.....	498	185	400	1,117	129	319	6
1887.....	770	110	399	935	285	318	-----
1888.....	638	174	474	717	414	323	3
Average.....	523	148	333	1,156	170	400	27

In Table 70 are presented the deaths from the principal local diseases for the period of years from 1877 to 1888 and the average for those years. As may be seen there was an increase in each disease as compared with the number returned in 1887. This increase in 1888 is all the more noticeable when compared with the average. An important feature of the table is the uniform rate of increase in the number of deaths from heart disease.

TABLE 70.—*Deaths in Michigan from some of the Principal Local Diseases returned for the Twelve Years 1877-1888, and the average.*

Years.	Diseases.					
	Convulsions.	Heart disease.	Bronchitis.	Pleurisy.	Peritonitis.	Bright's Disease.
1877.....	298	394	42	14	8	35
1878.....	288	368	46	16	11	32
1879.....	275	451	53	20	16	36
1880.....	348	482	50	26	12	80
1881.....	337	518	76	19	20	89
1882.....	356	562	106	16	21	138
1883.....	344	664	89	20	16	187
1884.....	436	718	98	18	27	179
1885.....	452	730	118	16	22	198
1886.....	481	725	97	20	32	214
1887.....	474	847	125	25	35	205
1888.....	516	961	199	46	46	210
Average.....	390	620	91	21	22	124

In the developmental class, as represented by the causes given in Table 71, there was an increase of 742 deaths over the number returned in 1887. The deaths from old age show an increase of 257 in 1888 over that in 1887, and also an increase of 430 over the average for the twelve years. Deaths of infants, both before and after birth, show a considerable increase over those in 1887, and an increase of 885 over the average.

TABLE 71.—Deaths in Michigan from Chief Developmental Diseases, returned for the Twelve Years 1877-1888, and the average.

Years.	Diseases.					
	Teething.	Still-born Infantile Premature	Child- birth.	Abortion.	Puerperal Convul- sions.	Old Age.
1877.....	66	785	151	6	5	489
1878.....	60	858	161	7	3	579
1879.....	40	787	193	12	5	608
1880.....	49	808	193	6	2	625
1881.....	84	761	192	8		725
1882.....	83	890	199	9	3	647
1883.....	55	1,084	221	12	4	728
1884.....	57	1,462	222	6	4	795
1885.....	49	1,612	217	12	1	773
1886.....	75	1,542	213	7	2	865
1887.....	81	1,607	226	11	1	917
1888.....	89	2,070	243	5	1	1,174
Average.....	66	1,185	202	8	3	744

TABLE 72.—Deaths in Michigan from some of the Prominent Violent Causes returned for the Twelve Years, 1877-1888.

Years.	Burns and Scalds.	Poison.	Railroad Accident.	Drowning.	Freezing.	Homicide.	Suicide.	Totals.
1877.....	60	21	42	103	1	14	66	307
1878.....	66	27	46	117	2	11	63	332
1879.....	64	15	40	122	5	15	59	320
1880.....	64	22	40	179	3	7	65	380
1881.....	175	25	75	125	2	15	57	474
1882.....	57	22	58	140	3	11	62	353
1883.....	65	33	109	158		15	91	471
1884.....	69	16	73	150	1	24	104	437
1885.....	67	26	76	132	6	28	91	426
1886.....	58	18	72	144	5	30	82	409
1887.....	49	31	90	163	1	29	105	468
1888.....	55	21	113	161	2	14	101	467
Average.....	71	23	69	141	3	18	79	404

The number of deaths from some of the principal violent causes may be seen in Table 72. The greatest increase in 1888 over the average appears from railroad accidents, suicides and drowning, while from burns and scalds, poison, freezing, and homicide there was a decrease from the average.

The deaths from disorders of the brain have made a material advance in numbers since in 1877, the most noticeable of which were those from paralysis. From softening of the brain, the mortality was six more than the average for twelve years, from apoplexy 31; from paralysis 197; from insanity 8, and from cephalitis and other unspecified brain diseases the mortality was 105 more than the average.

TABLE 73.—Deaths in Michigan Returned from Brain Disorders.—Twelve Years.

Years.	Softening of the Brain.	Apoplexy.	Paralysis.	Insanity.	Cephalitis and Unspecified Brain Diseases.	Totals.
1877.....	29	85	246	17	456	833
1878.....	25	91	241	11	370	738
1879.....	25	108	262	7	400	797
1880.....	27	119	278	8	475	907
1881.....	23	110	258	10	541	942
1882.....	36	87	357	8	448	936
1883.....	22	85	345	22	439	913
1884.....	40	130	397	17	524	1,108
1885.....	36	116	400	24	491	1,067
1886.....	30	158	485	25	492	1,190
1887.....	38	185	450	33	516	1,172
1888.....	37	144	553	25	583	1,342
Average.....	31	113	356	17	478	995

DEATHS IN 1888 GROUPED BY PART OF BODY DISEASED.

From Table 74 may be learned what per cent of the whole number of deaths were due to diseases of particular organs of the body for the years 1886-1888, and the average for ten years, 1878-1887. By removing the decimal point in the column of per cents one figure to the right it shows the number of deaths per thousand. Each year deaths from diseases of the lungs stand first in the order of groups presented in Table 74. The percentage of deaths from diseases of the lungs was greater in 1888 than for any other year of the table since 1885, and also greater than the ten-year average. It comprises about one-fifth of the total deaths of the State.

The next greatest ratio of deaths in 1888 occurred from the diseases of the bowels, although the percentage in 1888 was less than for any year since 1885 and also less than the ten-year average. Diseases of the throat show the most marked decrease both in number and percentage of any in the table, being 4 per cent less than the average.

TABLE 74.—*Order of Seven Groups of Causes of Deaths returned for the Years 1886–1888 inclusive, and the Average for Ten Years, 1878–1887.*

1886.			1887.			1888.			Average for 10 years, 1878–1887.		
Disease of	No.	Per cent to all causes.	Disease of	No.	Per cent to all causes.	Disease of	No.	Per cent to all causes.	Disease of	No.	Per cent to all causes.
All causes.	18,187	100.00	All causes.	19,482	100.00	All causes.	21,764	100.00	All causes.	16,822	100.00
Lungs	3,598	19.78	Lungs	3,711	19.05	Lungs	4,345	19.96	Lungs	3,302	19.63
Bowels	2,215	12.18	Bowels	2,585	13.27	Bowels	2,588	11.87	Bowels	2,005	11.92
Brain	2,201	12.10	Brain	2,274	11.67	Brain	2,398	11.00	Brain	1,908	11.31
Throat	1,566	8.61	Throat	1,377	7.07	Throat	1,245	5.72	Throat	1,635	9.72
Heart	825	4.54	Heart	992	5.09	Heart	1,094	5.03	Heart	712	4.23
Kidneys	429	2.36	Kidneys	434	2.23	Kidneys	451	2.07	Kidneys	305	1.81
Liver	122	.67	Liver	155	.80	Liver	351	1.61	Liver	139	.83
7 groups...	10,956	60.24	7 groups...	11,528	59.17	7 groups...	12,462	57.26	7 groups...	10,001	59.45

TABLE 75.—*Eleven Geographical Divisions of the State, with a list of Counties included in each Division.*

Upper Peninsular.	Northwestern.	Northern.	Northeastern.	Western.	Northern Central.	Eastern.	Central.	Southwestern.	Southern Central.	South- eastern.
Alger.	Benzie.	Antrim.	Alcona.	Kent.	Clare.	Arenac.	Barry.	Allegan.	Branch.	Macomb.
Baraga.	Gr. Traverse.	Charlevoix.	Alpena.	Lake. ^f	Gladwin.	Bay.	Clinton.	Berrien.	Calhoun.	Monroe.
Chippewa. ^a	Leelanaw.	Cheboygan.	Iosco.	Mason.	Isabella.	Huron.	Eaton.	Cass.	Hillsdale.	Oakland.
Delta.	Manistee.	Crawford.	Montmorency.	Muskegon.	Mecosta. ^h	Lapeer.	Genesee.	Van Buren.	Jackson.	Wayne.
Gogebic.	Manitou.	Emmet.	Ogemaw.	Newaygo. ^g	Midland.	Saginaw.	Gratiot.		Kalamazoo.	
Houghton.	Wexford.	Kalkaska. ^d	Oscoda. ^e	Oceana.	Missaukee. ⁱ	Sanilac.	Ingham.		Lenawee.	
Iron.		Otsego.	Presque Isle.	Ottawa.	Oscola.	St. Clair.	Ionia.		St. Joseph.	
Iale Royal.					Roscommon.	Tuscola.	Livingston.		Washtenaw.	
Keweenaw.							Montcalm.			
Luce.							Shiawassee.			
Mackinac. ^b										
Marquette.										
Menominee.										
Ontonagon.										
Schoolcraft. ^c										

No returns of deaths from the following townships:

- ^a Detour and Drummond.
^b Richmond.
^c Thompson.
^d Springfield.
^e Atherton, Big Creek, Comins, and Harmon.
^f Chase and Lake.
^g Beaver and Brooks.
^h Mecosta.
ⁱ Riverside.

DEATHS 1888, BY CLASSES OF CAUSES, BY DIVISIONS OF THE STATE.

The following table presents a view of the mortality of the State in eleven different sections, or geographical divisions, whose characteristics are more marked than those by counties. It must always be a subject of general interest to know the comparative healthfulness of the different parts of Michigan, and Table 76 gives this information for the year 1888.

The largest proportion of deaths in the State as a whole, was caused by local diseases, and the smallest by violent deaths. In the Upper Peninsular and northeastern divisions of the State, the largest proportion of deaths was from zymotic diseases, while in all the other divisions the largest percentage of deaths was from local diseases.

Based upon the population in 1884 and the deaths in 1888, it is seen that the death-rate has diminished from that in 1887 in the northwestern, northern and central divisions, and has increased in all the others. The southeastern division, which shows the highest death-rate in 1888, includes the county of Wayne and the city of Detroit, where the registration of deaths is more full and complete than in many parts of the State.

As in 1887, the central division shows the lowest death-rate in 1888 of all the eleven geographical divisions and the southeastern the highest.

The Upper Peninsular and northern divisions of the State show the largest proportion of deaths from unknown and unclassified diseases.

The various diseases included in each of these classes, and the counties in which they occurred may be seen in Table 77.

TABLE 76.—*Exhibiting, by Geographical Divisions, the Number of Deaths, the Per Cent of Deaths in 1888 to Population in 1884, the Per Cent of Deaths for each Division to Total Deaths for the State, and the Per Cent of Deaths from each Class of Causes to Deaths from all Causes.*

State and Geographical Divisions.	Population June 1, 1884, represented by deaths in 1888.	Deaths reported, 1888.		Per cent of all deaths in 1888 to Population in 1884.	Per cent of deaths from each class of causes to deaths from all causes, by geographical division.					
		Number.	Per cent of total.		Class I.—Zymotic diseases.	Class II.—Constitutional diseases.	Class III.—Local diseases.	Class IV.—Developmental diseases.	Class V.—Violent deaths.	Unknown and unclassified.
State.....	1,845,778	21,764	100.00	1.18	22.95	16.20	31.96	18.15	4.75	5.99
Upper Peninsular.....	114,718	1,753	8.05	1.53	30.01	8.38	23.56	18.08	8.39	11.58
Northwestern.....	55,200	610	2.80	1.11	18.53	10.49	32.79	21.64	6.39	10.16
Northern.....	46,297	391	1.80	.84	19.18	19.95	31.71	13.04	6.91	9.21
Northeastern.....	36,597	368	1.69	1.01	34.81	9.51	23.36	16.57	5.70	10.05
Western.....	208,779	2,165	9.95	1.04	21.06	16.81	34.09	17.88	5.08	5.08
Northern Central.....	71,413	686	3.15	.96	22.59	15.45	30.76	15.45	7.00	8.75
Eastern.....	291,713	2,959	13.60	1.01	22.98	15.95	29.98	18.66	5.98	6.45
Central.....	299,364	2,347	10.78	.78	19.26	19.13	37.24	16.32	4.26	3.79
Southwestern.....	127,985	1,273	5.85	.99	21.05	18.93	35.11	16.42	4.01	4.48
Southern Central.....	299,000	2,885	13.26	.96	18.37	19.41	37.50	16.78	3.92	4.03
Southeastern.....	294,712	6,327	29.07	2.15	25.46	15.98	29.94	20.04	3.16	5.42

TABLE 77.—CAUSES OF DEATH.—NOSOLOGICAL ARRANGEMENT.
Exhibiting the Number of Reported Deaths in Michigan, and in each County of the State, during the Year 1888, from Specified Causes, Statistically Classified (Still-births Included).

Causes of Death, 1888.	Counties, 1888.																		
	State.	Alcona.	Alcona.	Alcona.	Alcona.	Alcona.	Alcona.	Alcona.	Alcona.	Alcona.	Alcona.	Alcona.	Alcona.	Alcona.	Alcona.	Alcona.	Alcona.	Alcona.	Alcona.
All Causes.....	21,764	28	15	423	117	76	48	46	177	481	52	335	255	384	172	48	103	63	79
Specified Causes.....	20,537	27	13	407	108	72	43	44	172	459	50	316	252	368	160	44	92	59	72
Causes not Specified.....	1,227	1	2	16	9	4	5	2	5	22	2	19	3	16	12	4	11	4	7
CLASSES.																			
I.—Zymotic Diseases.....	4,994	4	12	111	51	15	10	20	29	112	10	75	43	47	24	4	38	20	10
II.—Constitutional Diseases.....	3,527	7	...	77	7	14	12	2	38	68	6	61	55	91	37	13	13	13	9
III.—Local Diseases.....	6,956	9	1	184	25	30	12	12	66	157	21	130	102	153	58	14	22	17	27
IV.—Developmental Diseases.....	3,850	4	...	71	17	5	6	4	30	90	12	48	43	56	31	9	12	3	15
V.—Violent Deaths.....	1,033	3	...	13	8	7	2	6	8	32	1	11	8	19	10	4	7	4	11
Unclassified.....	77	...	...	1	...	1	1	...	1	...	...	1	1	2	...	...	...	2	...
ORDERS.																			
I.—1. Miasmatic Diseases.....	4,950	4	12	110	51	14	10	20	29	112	10	74	42	47	24	4	38	20	10
2. Enthetic Diseases.....	15	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
3. Dietic Diseases.....	21	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4. Parasitic Diseases.....	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
II.—1. Diathetic Diseases.....	984	1	...	28	1	4	3	...	21	19	1	18	17	31	11	4	2	2	...
2. Tubercular Diseases.....	2,543	6	...	49	6	10	9	2	17	49	5	43	38	60	26	9	11	11	9

III.—1. Diseases of Nervous System.....	2,345	3	41	13	9	4	4	18	47	9	43	37	52	10	7	9	7	12	20	2	15	33	10	41	8	11
2. Diseases of Organs of Circulation.....	1,082	1	23	5	1	1	3	20	4	17	22	33	17	2	5	5	6	20	2	2	30	7	18	1	2	
3. Diseases of Respiratory Organs.....	1,855	2	29	10	9	6	5	20	42	2	30	21	32	10	3	5	4	6	20	9	22	9	36	1	14	
4. Diseases of Digestive Organs.....	1,004	1	23	1	3	1	2	18	32	2	19	8	21	11	2	3	1	2	11	1	9	13	6	13	2	
5. Diseases of Urinary Organs.....	455	2	11	3	—	—	—	5	10	3	9	12	12	7	—	—	—	7	—	1	8	1	4	—	2	
6. Diseases of Generative Organs.....	26	—	—	—	—	—	—	—	2	—	—	—	—	1	—	—	—	—	1	—	3	—	—	—	—	
7. Diseases of Organs of Locomotion.....	10	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	
8. Diseases of Integumentary System.....	139	—	7	1	1	—	—	2	4	1	2	2	2	2	—	—	—	1	5	—	1	4	1	2	1	
IV.—1. Developmental Diseases of Children.....	2,180	3	35	16	1	4	4	14	47	6	27	19	24	9	6	7	2	13	28	—	25	28	8	20	19	
2. Developmental Diseases of Women.....	259	—	5	—	1	1	—	3	6	—	1	1	6	2	1	1	—	1	4	—	3	1	1	6	7	
3. Developmental Disease of Old People.....	1,174	—	27	—	3	1	—	12	14	5	20	19	24	15	2	4	—	1	13	—	4	16	4	12	—	
4. Diseases of Nutrition.....	387	1	4	1	—	—	—	1	23	1	—	4	2	5	—	—	1	—	1	—	—	4	—	2	1	
V.—1. Accident or Negligence.....	554	3	5	4	4	1	3	6	24	1	4	6	12	4	3	7	1	6	4	—	7	3	2	2	8	
2. Battle.....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
3. Homicide.....	14	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—	1	1	—	—	—	
4. Suicide.....	101	—	1	—	—	—	—	1	—	—	2	1	2	3	—	—	—	3	1	—	2	2	—	1	—	
5. Execution.....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
6. Violent Deaths.....	364	—	7	4	3	1	3	1	8	—	5	1	4	2	1	—	3	2	6	—	4	7	1	4	19	
CLASS I.—ZYMOTIC.....	4,994	4	12	111	51	15	10	20	29	112	10	75	43	47	24	4	38	20	10	39	1	51	64	6	45	
I.—ORDER 1. Miasmatic.....	4,950	4	12	110	51	14	10	20	29	112	10	74	42	47	24	4	38	20	10	38	1	50	63	6	45	
1. Small-pox.....	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
2. Measles.....	414	1	8	17	—	2	3	1	10	2	4	7	2	2	—	—	—	4	7	5	—	4	1	—	2	
3. Scarletina.....	323	—	1	2	—	—	—	—	9	—	—	—	2	1	—	—	5	1	—	—	—	3	—	2		
4. Diphtheria.....	717	1	7	8	—	2	5	—	4	9	—	18	2	4	3	1	7	6	1	7	—	5	7	1		
5. Quinzy.....	18	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—		
6. Croup.....	474	—	7	4	2	—	—	—	1	10	1	2	1	—	—	2	1	3	1	—	—	5	4	1		

III.—ORDER 6. Generative Organs.....									
1. { Ovarian Disease									
1. { Ovarian Tumor.....	8								2
2. Disease of Uterus.....	18							1	1
3. Hydrocele.....									
III.—ORDER 7. Organs of Locomotion.....									
1. Arthritis.....									
2. Joint Diseases.....	10								
III.—ORDER 8. Integumentary System.....									
1. Phlegmon.....	49								
2. Ulcers.....	8								
3. Skin Disease.....	82								
CLASS IV.—DEVELOPMENTAL DISEASES.....									
IV.—ORDER 1. Diseases of Children.....									
1. Still-born.....	1,858	8							
2. { Infantile.....	643								
2. { Premature Birth.....	69								
3. Cyanosis.....	2								
4. Spina Bifida.....	3								
5. Other Malformations.....	11								
6. Teething.....	89								
7. Injury at Birth.....	5								
IV.—ORDER 2. Dev. Dis. of Women.....									
1. { Dysmenorrhea.....	259								
1. { Turn of Life.....	7								

TABLE 77.—CONTINUED.—*Causes of Death, Classified.*

Causes of Death, 1888.		Counties, 1888.																									
	State.	Alcona.	Alger.	Allegan.	Alpena.	Antrim.	Arenac.	Baraga.	Barry.	Bay.	Benzie.	Berrien.	Branch.	Calhoun.	Cass.	Charlevoix.	Cheboygan.	Chippewa.	Clare.	Clinton.	Crawford.	Delta.	Eaton.	Emmet.	Genesee.	Gladwin.	Gogebic.
{ Child-birth..... 2. { Abortion..... { Uterine Hemorrhage.....	246			4	1	1	1	1	2	5		1	1	6	2	1	1	1	1	4	3			1	6		7
	5			1																							
	1								1																		
IV.—ORDER 3. Dev. Dis of Old People	1,174			27	3	1	1	12	14	5	20	19	24	15	2	4			1	13		4	16	4	12		
1. Old Age.....	1,174			27	3	1	1	12	14	5	20	19	24	15	2	4			1	13		4	16	4	12		
IV.—ORDER 4. Diseases of Nutrition.....	337	1	4	1					1	23	1		4	2	5			1		1			4		2	1	2
1. Atrophy and Debility.....	337	1	4	1					1	23	1		4	2	5			1		1			4		2	1	2
CLASS V.—VIOLENT DEATHS	1,033	3	13	8	7	2	6	8	32	1	11	8	19	10	4	7	4	11	11		14	13	3	7	27		
V.—ORDER 1. Accident or Negligence	554	3	5	4	4	1	3	6	24	1	4	6	12	4	3	7	1	6	4		7	3	2	2	8		
1. Fractures and Contusions.....	138	2	1	1	1				8			1	2	1	2	1	2	1	2		1	2	4	1	1	3	
2. Wounds.....	21		1	1														1	2		1				1	1	
3. Burns and Scalds.....	55	1	1	1					1									1							2		
4. Poison.....	25				1						1		3						1								
5. Drowning.....	161		1	3	1	1	1	4	15	1	3	3	4	1	1	4	1					1		1	1		
6. Suffocation.....	37			1	1			1	1	1		1		1	1	1								1			
7. Otherwise.....	117	1	1	1	1		2	1	4			1	3	1	1	1	1	3			2	1	1	1	2		
V.—ORDER 2. In Battle.....																											
V.—ORDER 3. Homicide.....	14												1	1								1	1				
1. Murder.....	14												1	1								1	1				

V.—ORDER 4. Suicide.....	101	1	1	1	1	2	1	2	3	1	1	2	2	1	1	2	2	1									
1. Wounds.....	12											2					1										
2. Poison.....	8				1	1			1																		
3. Drowning.....	4								1																		
4. Hanging.....	14														1	1	1	1									
5. Otherwise and not Specified.....	63	1				1	1	1	1	2		1	1														
V.—ORDER 5. Execution.....																											
1. Hanging.....																											
V.—ORDER 6. Violent Deaths not included above.....	364	7	4	3	1	3	1	8	5	1	4	2	1	3	2	6	4	7	1	4	19						
UNCLASSIFIED.....	77	1	1	1	1	1	1	1	1	1	2			2			2	3	2								
1. Head Disease.....	3																										
2. Hemorrhage.....	30									1	2						1	3	2								
3. Inflammation.....	40	1	1	1	1	1	1							2													
4. Otherwise.....	4								1								1										
Causes not Specified.....	1,227	1	2	15	9	4	5	2	5	22	2	19	8	16	12	4	11	4	7	10	8	12	5	9	5	8	25

TABLE 77.—CONTINUED.—*Causes of Death, Classified.*

Causes of Death, 1888.		Counties, 1888.																													
		Gd. Travers.	Hilldale.	Houghton.	Huron.	Ingham.	Iron.	Isabella.	Jackson.	Kalamazoo.	Kalkaska.	Kent.	Keweenaw.	Lake.	Lapeer.	Leelanaw.	Lenawee.	Livingston.	Luce.	Mackinac.	Macomb.	Manistee.	Manitou.	Marquette.	Mason.	Meosta.	Menominee.	Midland.			
All Causes.....		131	168	259	343	202	408	226	141	23	180	396	392	42	1004	50	37	245	104	450	151	5	44	324	230	4	469	115	153	306	90
Specified Causes.....		130	163	250	273	177	392	211	129	16	169	372	386	41	950	48	37	237	77	427	143	4	37	315	205	4	451	109	144	268	77
Causes not Specified.....		1	5	9	70	25	16	15	12	7	11	24	6	1	54	2	8	8	27	23	8	1	7	9	25	18	6	9	40	13	
CLASSES.																															
I.—Zymotic Diseases.....		27	37	61	64	46	99	22	46	4	54	106	76	8	133	12	9	66	18	69	29	1	8	67	48	171	28	33	102	26	
II.—Constitutional Diseases.....		12	31	34	28	22	63	63	16	27	59	65	6	192	7	5	40	18	113	27	6	53	13	1	30	21	31	29	8		
III.—Local Diseases.....		57	51	103	91	62	158	79	39	10	47	133	163	16	368	18	10	79	16	153	57	3	7	117	74	114	31	47	57	27	
IV.—Developmental Diseases.....		27	33	41	66	40	55	35	23	1	32	60	69	8	157	9	4	37	21	79	23	7	63	50	1	91	21	18	63	12	
V.—Violent Deaths.....		6	11	11	22	7	17	12	5	1	9	13	13	3	39	2	9	15	4	12	7	7	15	19	2	44	8	12	17	3	
Unclassified.....		1	1	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	3	1	1		
ORDERS.																															
I.—1. Miasmatic Diseases.....		26	37	60	62	46	98	22	46	3	52	105	76	8	191	12	9	66	18	69	29	1	8	67	48	171	27	33	102	25	
2. Euthetic Diseases.....		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
3. Dietic Diseases.....																															
4. Parasitic Diseases.....																															
II.—1. Diathetic Diseases.....		2	7	8	6	7	28	19	3	5	21	19	1	44	14	2	34	12	1	15	2	8	7	9	5	3					
2. Tubercular Diseases.....		10	24	26	22	15	35	44	13	22	38	46	5	148	7	5	26	16	79	15	5	38	11	1	22	14	22	24	5		
III.—1. Diseases of Nervous System.....		31	15	35	29	15	48	18	10	3	16	33	58	5	109	5	4	22	4	50	11	1	3	34	31	29	3	13	16	11	
2. Diseases of Organs of Circulation.....		10	10	28	11	5	34	21	5	5	8	20	31	1	57	1	15	1	30	15	1	21	5	1	5	16	4	7	9	1	

3. Diseases of Respiratory Organs.....	10	13	18	34	22	40	21	15	5	13	40	38	5	123	8	2	22	8	32	14	30	23	41	16	16	22	9		
4. Diseases of Digestive Organs.....	3	10	13	12	15	22	10	7	1	7	21	19	3	51	4	3	14	3	23	9	3	24	14	19	7	4	0	4	
5. Diseases of Urinary Organs.....	2	2	7	4	2	9	5	1	1	2	17	15	2	21	...	...	5	...	12	7	2	5	1	4	1	5	2	
6. Diseases of Generative Organs.....	1	...	1	...	...	1	2	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...
7. Diseases of Organs of Locomotion.....	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
8. Diseases of Integumentary System.....	...	1	1	1	2	4	2	1	...	1	2	2	...	5	1	1	1	...	6	1	3	...	4	...	2	1	...		
IV.—1. Developmental Dis. of Children.....	11	22	15	49	25	28	15	16	1	15	19	29	7	66	7	2	15	15	19	11	6	30	39	57	15	10	53	8	
2. Developmental Dis. of Women.....	4	1	3	4	6	2	2	3	...	7	4	6	1	15	...	1	4	...	6	2	...	4	6	3	1	1	6	1	
3. Developmental Dis. of Old People.....	11	10	21	8	9	23	17	3	...	9	31	26	...	53	2	...	15	6	54	9	1	25	5	1	15	5	7	4	3
4. Diseases of Nutrition.....	1	...	2	5	...	2	1	1	...	1	6	8	...	18	...	1	3	...	...	1	4	...	16	...	...	...	...	...
V.—1. Accident or Negligence.....	3	8	9	9	6	7	5	2	1	5	8	6	2	23	...	5	1	3	5	5	6	4	9	2	2	7	5	7	2
2. Battle.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3. Homicide.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4. Suicide.....	2	...	...	...	1	2	...	...	...	...	2	...	...	6	2	5	...	2	1	...	4	3	3	...	...	...	...	...
5. Execution.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6. Violent Deaths.....	1	3	2	13	1	9	5	3	...	4	3	7	1	10	2	2	9	1	5	1	1	7	7	39	1	7	10	1	
CLASS I.—ZYMOTIC.....	27	37	61	64	46	99	22	46	4	54	106	76	8	133	12	9	66	18	69	29	1	8	67	48	171	28	33	102	26
I.—ORDER 1. Miasmatic.....	26	37	60	62	46	98	22	46	3	52	105	76	8	191	12	9	66	18	69	29	1	8	67	48	171	27	33	102	25
1. Small-pox.....	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...
2. Measles.....	6	4	9	4	7	3	...	6	...	14	2	4	3	3	...	2	11	7	12	4	...	2	1	35	1	5	17	8	
3. Scarlatina.....	...	1	2	9	7	16	...	...	...	1	4	3	...	6	...	...	2	...	3	...	4	1	13	...	...	2	3	2
4. Diphtheria.....	5	2	4	7	...	5	2	1	...	3	41	3	...	14	...	1	20	...	3	...	...	10	3	24	4	4	15	1
5. Quinsy.....	1	2	1	...	2	1	1	
6. Croup.....	1	3	5	6	8	1	...	4	...	7	2	2	...	9	2	3	...	1	8	5	17	4	...	9	...	
7. Whooping-cough.....	1	4	1	...	1	5	1	1	2	...	1	16	1	1	2	...	6	5	1	10	...	

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V.—ORDER 4. Suicide.....	2					1	2			2		6	2	5		2	1		4	3								
1. Wounds.....													2	2					1									
2. Poison.....												1																
3. Drowning.....	1																		1									
4. Hanging.....														1	1	1												
5. Otherwise and not Specified.....	1					1	2		2		5	2	2		1			2	3	3								
V.—ORDER 5. Execution.....																												
1. Hanging.....																												
V.—ORDER 6. Violent Deaths not Included above.....	1	3	2	13	1	9	5	3	4	3	7	1	10	2	2	9	1	5	1	1	7	39	1	7	10	1		
UNCLASSIFIED.....	1			2						1			1				1		2		1		1		3	1		
1. Head Disease.....																												
2. Hemorrhage.....										1			1						1		1							
3. Inflammation.....	1			1														1		1		1		1	3	1		
4. Otherwise.....																												
Causes not Specified.....	1	5	9	70	25	16	15	12	7	11	24	6	1	54	2	8	27	23	8	1	7	9	25	18	6	9	40	13

TABLE 77.—CONTINUED.—Causes of Death, Classified.

Causes of Death, 1888.		Counties, 1888.																									
Missaukee.	Monroe.	Montcalm.	Montmorency.	Muskegon.	Newaygo.	Oakland.	Ocean.	Ogemaw.	Ontonagon.	Oscoda.	Oshtemo.	Ottawa.	Presque Isle.	Rosecommon.	Saginaw.	Sanilac.	Schoolcraft.	Shiawassee.	St. Clair.	St. Joseph.	Tuscola.	Van Buren.	Washtenaw.	Wayne.	Westford.		
All Causes.....	32	320	232	7	461	112	382	95	32	23	120	4	19	341	39	18	916	268	31	182	482	338	317	343	411	5,301	89
Specified Causes.....	28	310	227	7	443	102	368	94	30	23	111	3	19	321	28	18	865	243	28	171	452	332	305	336	391	5,015	86
Causes not Specified.....	4	10	5		18	10	14	1	2		9	1		20	11		51	25	3	11	30	6	12	7	20	286	3
CLASSES.																											
I.—Zymotic Diseases.....																											
II.—Constitutional Diseases.....																											
III.—Local Diseases.....																											
IV.—Developmental Diseases.....																											
V.—Violent Deaths.....																											
Unclassified.....																											
ORDERS.																											
I.—1. Miasmatic Diseases.....																											
2. Enanthic Diseases.....																											
3. Dietic Diseases.....																											
4. Parasitic Diseases.....																											
II.—1. Diathetic Diseases.....																											
2. Tubercular Diseases.....																											
III.—1. Diseases of Nervous System.....																											
2. Diseases of Organs of Circulation.....																											

3. Diseases of Respiratory Organs.....	2	23	20	1	58	9	34	5	2	9	3	22	1	3	97	20	13	26	37	36	53	39	331	14	
4. Diseases of Digestive Organs.....	14	15	23	11	15	10	2	2	2	4	22	1	2	24	11	9	13	27	14	15	17	213	3		
5. Diseases of Urinary Organs.....	6	11	1	8	6	22	4	1	3	1	4	2	4	9	8	8	15	11	8	11	12	73	2		
6. Diseases of Generative Organs.....	1	1	1	1	1	1	1	1	1	1	2	2	2	2	3	3	3	3	3	3	3	4	4		
7. Diseases of Organs of Locomotion.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2		
8. Diseases of Integumentary System.....	1	1	1	5	2	2	2	2	2	2	1	1	1	1	7	2	1	6	7	1	3	21	21		
IV.—1. Developmental Dis. of Children.....	3	24	35	2	65	13	20	11	2	7	14	1	48	7	3	115	29	5	14	41	13	24	20	651	14
2. Developmental Dis. of Women.....	1	2	3	2	1	2	1	2	2	1	3	2	2	2	6	5	2	9	5	6	6	52	4		
3. Developmental Dis. of Old People.....	1	28	4	16	2	41	6	4	4	2	22	2	2	2	43	13	1	13	31	14	24	37	263	2	
4. Diseases of Nutrition.....	5	1	1	4	4	6	2	2	2	2	9	9	1	1	34	5	3	3	1	11	16	11	1	1	
V.—1. Accident or Negligence.....	2	10	4	15	5	7	1	1	1	5	1	16	1	1	25	4	3	4	24	8	16	12	12	97	3
2. Battle.....																									
3. Homicide.....							2																	6	
4. Suicide.....	1	1	1	1	1	3			3	1	1	1	2	1	11	2	1	3	2	1	5	14	1	1	
5. Execution.....																									
6. Violent Deaths.....	1	8	5	1	6	4	3	2	1	2	1	4	18	3	7	6	6	4	4	34	3				
CLASS I.—ZYMOTIC.....	6	80	35	1	127	20	54	20	15	6	17	3	59	11	5	197	54	10	53	122	60	73	68	1,410	10
L.—ORDER 1. Miasmatic.....	6	80	35	1	127	19	53	20	15	6	17	3	58	11	5	197	54	9	53	121	60	72	58	1,393	10
1. Small-pox.....	1																								
2. Measles.....	35	5	8	2	2	3	2	3	2	2	6	6	3	2	3	2	1	1	4	5	1	6	74	3	
3. Scarlatina.....	2	1	4	5	5	5	5	5	2	1	1	1	7	2	1	6	7	10	1	6	1	159			
4. Diphtheria.....	8	1	13	6	5	9	5	5	1	1	5	1	1	21	9	1	1	2	1	14	8	11	300	2	
5. Quinsy.....	1																							1	
6. Croup.....	4	1	14	1	1	1	1	1	1	1	5	5	5	24	3	2	15	2	6	3	3	242	2		
7. Whooping-cough.....	6			10	1	1	1	1	1	3	1	1	1	1	8	8	2	2	2	2	2	2	34		

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CAUSES OF DEATH, CLASSIFIED.

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CAUSES OF DEATH, SPECIFIED.

Total	25	13	38	48	31	26	31	47	40	31	28	41	405	319	332	206	310	293	Brain, Inflam. of	225	37	20	21	17	8	10	11	14	8	6	8	4	5	2	2		
Males	11	6	19	28	20	15	11	24	22	16	23	21	218	156	172	157	177	163	"	118	22	7	10	8	5	9	6	4	5	4	4	3	5	3			
Females	15	10	19	20	11	11	20	23	18	15	5	20	187	163	160	139	133	130	"	107	15	11	9	3	1	5	10	3	2	4	1	2	1				
Total	2	1	1	2	2	1	1	2	1	2	1	2	18	19	17	20	11	4	Brain, Paralysis of	2																	
Males	1	1	2	1	1	1	1	1	2	1	1	2	12	9	8	10	5	3	"	2																	
Females	2												6	10	9	10	6	1	"																		
Total	3	2	1	3	4	5	4	5	3	2	3	3	37	38	30	36	40	22	Brain, Softening of	4	2																
Males	3	1	1	3	3	2	2	1	2	2	2	2	22	26	26	27	28	16	"	2	1																
Females	1												15	12	4	9	12	6	"	2	1																
Total	1	1											2	1	2				Breast Disease																		
Males	4	1	8	2	1			1					12	4	2	1	6		Bronchitis, Capillary	8																	
Females	2												4	2			5		"	3																	
Total	2	1	8	1	1								8	2	2	1	1		"	5																	
Males	1	1	1					1					4	3	2	4			Bronchitis, Chronic	1																	
Females	1												2	2		8			"	1																	
Total	1												2	1	2	1			"																		
Males	13	16	28	33	17	10	6	13	12	16	20	195	118	95	109	98	83		Bronchitis	142	3	2	1	1	3	1	2	6	3	7	5	6	2	5	1		
Females	5	7	9	15	17	6	2	7	8	7	9	98	68	56	63	54	44		"	72	1	1			1	1	1	3	3	3	1	3	1	3	1		
Total	8	9	7	8	16	11	4	4	6	4	9	11	97	49	39	46	44	39	"	70	2	1	1	2		1	3	4	2	4	3	1	2				
Males	3	1	2	3	1	4	2	2	5	6	6	35	27	36	35	48	45		Burns	18	7	1	2	3	1												
Females	3	1	1	3					4	1	3	16	15	21	14	23	19		"	9	2			2	2	1											
Total	1	1	2	1	1	2		2	1	5			19	12	15	21	25	26	"	9	5	1		1													
Males	20	32	36	40	44	47	44	38	49	53	37	1	480	453	391	403	361	333	Cancer	11	1	2	12	5	12	20	46	42	55	44	68	65	45	30	16	4	
Females	7	13	19	15	16	19	18	14	17	27	10		193	185	171	183	173	160	"	7	1			3	1	2	4	13	10	18	19	34	35	23	14	9	
Total	13	19	17	25	28	28	26	19	32	36	27	1	287	268	220	220	188	223	"	4	1	1	2	9	4	10	16	83	32	37	25	34	30	22	16	7	4
Males	2	1	3	1	1	3	5	1	1	2	1	2	21	28	25	15	37	21	Canker, (Noma)	20																	
Females	1												9	8	9	7	20	13	"	9																	
Total	1	1	1	1	1	2	4	1	1	1	1	1	12	20	16	8	17	8	"	11																	

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CAUSES OF DEATH, SPECIFIED.

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CAUSES OF DEATH, SPECIFIED.

197

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TABLE 78.—CONTINUED.—Specified Causes of Death.

Sex.		Months, 1888.												Years.						Causes of Death.	Ages in Periods of Years,—1888.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
		January. February. March. April. May. June. July. August. September. October. November. December. Unknown.												1888. 1887. 1886. 1885. 1884. 1883.							Infantile.	"	Inflammation.	"	"	Influenza.	"	"	Insanity.	"	"	Insomnia.	Intemperance.	"	Jaundice.	"	"	Joint Disease.	"	Kidneys, Bright's Disease of.	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"

CAUSES OF DEATH, SPECIFIED.

201

Females.....	5	2	6	4	5	6	2	4	5	6	47	32	37	Kidney, Bright's Dis. of	4	2	3	3	2	3	5	7	6	2	1	1	---				
Total.....	5	7	6	9	8	5	6	10	15	8	16	103	97	76	Kidney Disease.....	3	1	2	1	3	4	2	3	4	2	10	17	14	13	---	
Males.....	5	6	5	8	7	6	3	8	11	6	13	84	77	57	"	1	1	2	2	4	1	1	3	1	8	15	11	13	13	---	
Females.....	1	1	1	1	1	2	2	2	4	2	3	19	20	19	"	2	---	---	1	1	2	1	1	2	2	3	1	---	---		
Total.....	1	2	2	2	7	3	6	3	1	2	4	31	21	30	Kidney, Inflamm. of	3	5	1	3	1	2	2	1	2	2	1	2	4	---	---	
Males.....	1	1	2	6	3	4	1	1	2	3	---	24	14	20	"	3	2	1	2	1	1	1	---	2	2	1	2	2	4	---	
Females.....	1	---	---	1	1	2	2	---	---	1	---	7	7	10	"	---	3	1	1	1	1	---	---	---	---	---	---	---	---	---	
Total.....	---	---	---	1	1	1	---	---	---	---	---	3	4	3	Laryngitis.....	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Males.....	---	---	---	1	1	---	---	---	---	---	---	2	2	3	"	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Females.....	---	---	---	---	---	---	1	---	---	---	---	1	---	---	"	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Total.....	---	---	---	2	1	3	---	---	---	---	---	6	2	6	Lightning.....	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Males.....	---	---	---	1	1	2	---	---	---	---	---	4	2	4	"	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Females.....	---	---	---	1	---	---	1	---	---	---	---	2	---	2	"	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Total.....	1	1	1	1	1	1	1	1	1	1	1	6	5	11	Liver, Abscess of...	1	---	---	---	1	1	2	---	---	---	---	---	---	---	---	
Males.....	1	---	---	1	---	---	---	---	---	---	---	3	2	6	"	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Females.....	---	---	---	1	---	---	---	1	---	---	---	3	3	5	"	---	---	---	---	1	1	1	---	---	---	---	---	---	---	---	
Total.....	1	2	1	1	1	1	1	1	1	1	1	7	4	2	Liver, Cirrhosis of.	1	---	---	---	2	1	2	---	---	---	---	---	---	---	---	
Males.....	---	---	---	1	1	1	---	---	---	---	---	4	3	2	"	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Females.....	1	---	---	1	---	---	1	---	---	---	---	3	1	---	"	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Total.....	6	3	13	8	9	7	6	5	5	10	87	86	69	71	Liver, Disease of...	11	1	---	---	8	4	5	6	4	10	7	8	5	6	1	
Males.....	3	2	8	4	7	6	5	4	3	3	2	50	48	40	"	5	1	---	---	3	2	4	3	3	7	5	4	5	3	4	1
Females.....	3	1	5	4	1	3	2	3	2	3	7	37	38	29	"	6	---	---	---	5	4	3	2	1	1	3	2	4	2	2	---
Total.....	1	1	---	3	1	3	1	4	2	2	1	6	25	11	Liver, Enlargement of...	3	1	---	---	1	1	3	1	4	2	1	4	1	1	2	---
Males.....	1	---	---	1	2	2	2	1	1	3	---	13	4	4	"	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Females.....	1	---	---	3	1	1	2	---	---	---	---	12	7	---	"	2	1	---	---	1	---	---	---	---	---	---	---	---	---	---	---
Total.....	1	2	1	1	1	3	2	---	---	1	2	13	14	8	Liver, Inflamm. of...	2	---	---	---	1	1	---	---	---	---	---	---	---	---	---	---
Males.....	1	1	---	1	---	1	3	---	---	1	1	8	9	3	"	2	---	---	---	1	---	---	---	---	---	---	---	---	---	---	---
Females.....	1	1	---	1	---	---	2	---	---	1	1	5	5	5	"	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

	50	35	41	46	48	47	43	42	31	40	51	85	1	584	356	866	372	324	328	Still-born	584
Females...																					
Unborn...	8	8	2	1	1	1	1	1	1	1	1	2	15	48	30	54	48			"	15
Total			1	2	3	4	1	7	5	9	4	2	6	44	32	31	29	26	26	Stomach Disease...	16
Males			1	1	1	1	5	8	7	4	1	8	27	16	16	15	17	16	16	"	11
Females			1	2	3	1	2	2	2	2	1	8	17	16	15	14	9	9	9	"	5
Unborn																				"	
Total																				"	
Males	1	2	2	4	5	2	5	9	1	3	4	4	1	43	35	37	44	39	42	Stomach, Inflamm.	7
Females			2	1	1	3	7	1	3	4	2	1	25	14	19	18	14	20	20	"	2
Females	1	2	3	4	2	2	2	2	2	2	2	2	18	21	18	26	25	22	22	"	5
Total			2	2	2	1	1	1	1	3	3	11	7	9	8	6	8	8	8	Stomach, Neuralgia of	1
Males			1	2	2	2	2	2	2	2	2	3	5	2	2	2	2	2	2	"	1
Females			1	2	2	1	1	1	1	3	3	8	2	7	8	4	8	8	8	"	1
Total			1	1	1	1	1	1	1	1	1	4	4	1	2	1	1	1	1	Stomach, Paralysis of	1
Males	1		1	1	1	1	1	1	1	1	1	3	1	1	2	1	1	1	1	"	1
Females			1	1	1	1	1	1	1	1	1	3	1	1	1	1	1	1	1	"	1
Males																				Stomach, Rupture of	1
Females																				"	
Total			2	2	1	5	4	2	3	2	2	21	13	9	9	10	9	9	9	Stomach, Ulceration of	2
Males			1	1	1	4	2	3	3	2	14	11	3	6	5	2	2	2	2	"	2
Females			1	1	1	1	2	2	2	2	7	7	6	3	5	7	7	7	7	"	1
Males																				Stone in Bladder	
Total	2	2	8	1	1	1	1	1	1	3	1	13	8	10	7	11	6	6	6	Strangulation	11
Males	1	1	1	1	1	1	1	1	1	1	1	6	4	6	4	6	3	3	3	"	5
Females	1	1	1	2	1	1	1	1	1	2	2	7	4	4	3	5	3	3	3	"	6
Males																				Stricture of Intestines	
Females																				"	
Males																				Strict. Oesophagus	
Females																				Stricture Urethra	

CAUSES OF DEATH, SPECIFIED.

[illegible]

CAUSES OF DEATH, SPECIFIED.

	33	44	45	37	56	46	67	58	59	39	41	46	6	577	616	461	452	537	623	Unknown	204	18	12	16	28	17	21	20	15	15	9	17	22	13	14	9	3	3	
Females.....																																								
Unknown.....																																								
Total.....	1	1	1	1	1	1	1	1	1	1	1	1	1	4	3	1	6	2									1								1	1	1			
Males.....	1	1	1	1	1	1	1	1	1	1	1	1	1	3	2	4	2																	1	1	1				
Females.....														1	1	1	2										1													
Males.....	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	1	1	2	2														1	1	1					
Females.....																		1	1																					
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UNUSUAL CAUSES OF DEATH.

The number of deaths in 1888 compiled in Table 78 as "Casualty" was 364, which was 21 less than in 1887. Accidental shooting had 3 fewer victims than in 1887. Horses, by kicking, runaways, and wagon accidents, managed to dispose of 43 human lives in 1888 as compared with 37 in 1887. Returned as simple "accidents," without specifying the cause, there were 154 as against 167 in 1887. The number who lost their lives while engaged in mining was large as usual.

TABLE 79.—Deaths in Michigan in 1888 Compiled as "Casualty."

Casualty,—Causes as returned.	No.	Casualty,—Causes as returned.	No.
Total number tabulated as Casualty in Table 78	364	Fall of stone.....	1
		Fall from wagon.....	6
		Hung in crib.....	1
Accidental, unclassified.....	154	Killed on a boat.....	2
Accidental poisoning.....	8	Killed by a cow.....	1
Accidentally burned.....	5	Killed in car shop.....	1
Accidentally shot.....	14	Killed in elevator.....	1
Bursting of emery wheel.....	2	Killed by an ax.....	1
Crushed in machinery.....	4	Killed by fire department.....	1
Crushed under timber.....	4	Killed by a horse.....	2
Drank kerosene.....	1	Killed in mill.....	22
Explosion of boiler.....	2	Killed in mine.....	30
Explosion of dynamite.....	4	Killed in lumber woods.....	7
Explosion of lamp.....	28	Killed on toboggan slide.....	1
Explosion of powder.....	4	Killed under a tree.....	1
Fall.....	2	Kicked by a horse.....	19
Fall from building.....	4	Lost in woods.....	2
Fall from horse.....	3	Runaway.....	14
Fall from scaffold.....	12	Scalded, hot water.....	5

STATISTICS CONCERNING SUICIDE.

The total number of deaths reported as due to suicide in Michigan during the fifteen years from 1874 to 1888 was 1,105, of which number 836 were males, and 268 were females. For the year 1888, there were 101, of which 82 were males and 19 were females.

Table 80 shows the distribution of suicides, by months, as recorded for each year and the total for the entire period. It will be seen that the tendency was to the occurrence of the greatest number of suicides during the months of May, June, and August. This tendency appears to be the same everywhere, not only in the United States, but also in the countries of Europe.

It is a fact worthy of note that during all these years only one death of a colored person has been returned as due to suicide, that being the case of a mulatto in 1878.

The classification by nativity shows that 607 were born in the United States, 260 having been born in Michigan, and 347 in other States. Four hundred and fourteen were born in foreign countries, and in 84 cases the nativity was not reported. Of the foreign-born 63 were from Canada, 53 from England, 208 from Germany, 33 from Ireland, and 15 from Scotland. The classification by conjugal condition shows that 657 were married, 301 were single, 97 were widowed, and in 50 cases the conjugal condition was not stated in the returns.

The relative prevalence of certain modes of suicide may also be seen. Suicide by shooting and hanging are the most common means employed by males, but are comparatively rare among females, who resort to poison or drowning. In 582 cases the manner of death was not stated in the returns.

TABLE 80.—*Certain facts Concerning Persons returned as having Died by Suicide in Michigan during the years 1874-1888.*

Years.	Number.	Months of Death.												Sex.			Color.	Condition.				
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.	Totals.	Males.		Females.	Married.	Single.	Widowed.	Unknown.
Totals.....	1,105	59	43	73	97	110	110	90	111	96	100	104	102	5	1,105	886	268	White.	657	301	97	50
1874.....	53	7	3	4	1	4	5	5	4	3	5	6	6	---	53	31	22	53	28	17	4	4
1875.....	52	3	4	3	4	8	4	4	4	5	3	6	4	---	52	42	10	52	34	10	3	5
1876.....	54	3	1	3	7	7	8	2	4	5	6	5	3	---	54	43	11	54	35	12	3	4
1877.....	66	2	5	7	4	7	5	6	7	4	2	7	10	---	66	46	20	66	38	23	2	3
1878.....	63	5	2	5	5	5	9	5	7	5	6	5	4	---	63	40	23	63	41	16	4	2
1879.....	59	3	2	4	7	3	8	5	7	5	4	4	7	---	59	46	13	59	35	19	3	2
1880.....	65	4	3	6	8	9	6	3	4	7	2	6	6	1	65	50	15	65	38	20	4	3
1881.....	57	1	5	3	3	4	4	7	9	7	4	6	4	---	57	42	15	57	34	11	9	3
1882.....	62	2	3	4	6	8	7	2	7	5	7	4	6	1	62	44	18	62	32	24	3	3
1883.....	91	5	1	7	9	5	8	11	9	4	6	16	10	---	91	69	22	91	53	23	12	3
1884.....	104	4	5	7	8	6	16	8	8	14	10	10	8	---	104	84	20	104	71	28	4	1
1885.....	91	4	4	3	7	7	9	9	11	4	14	10	8	1	91	78	12	91	55	19	13	4
1886.....	82	7	2	4	6	13	5	4	11	9	7	5	9	---	82	64	18	82	46	20	11	5
1887.....	105	3	4	10	12	11	5	10	12	10	13	6	9	---	105	75	30	105	63	28	10	4
1888.....	101	6	4	3	10	13	11	9	7	9	11	8	8	2	101	82	19	101	54	31	12	4

b 1 sex unknown.

a 1 mulatto.

TABLE 80.—CONTINUED.—*Suicidal Deaths.*

Occupation.	No.	Occupation.	No.	Occupation.	No.
Agents.....	7	Gardeners.....	2	Peddlers.....	3
Architects.....	1	Grain dealers.....	1	Physicians.....	7
Bakers.....	2	Harness-makers.....	2	Policemen.....	1
Bankers.....	2	Hatters.....	1	Printers.....	4
Barbers.....	2	Hotel-keepers.....	4	Prostitutes.....	7
Blacksmiths.....	4	House-keepers.....	98	Sailors.....	5
Book-keepers.....	11	House-wives.....	22	Salesmen.....	3
Brewers.....	4	Housework.....	2	Saloon-keepers.....	21
Brick-makers.....	3	Insurance agents.....	3	Seamstresses.....	1
Business men.....	3	Laborers.....	148	Servants.....	27
Butchers.....	5	Lawyers.....	6	Ship-carpenters.....	1
Cabinet-makers.....	3	Lumbermen.....	4	Shoe-makers.....	11
Carpenters.....	29	Machinists.....	5	Soldiers.....	3
Cigar-makers.....	5	Manicure.....	1	Stave-makers.....	1
Clerks.....	19	Masons.....	8	Students.....	5
Conductors.....	1	Mechanics.....	11	Tailors.....	7
Contractors.....	1	Merchants.....	19	Tanners.....	3
Coopers.....	3	Millers.....	3	Teachers.....	4
Cutters.....	1	Milliners.....	1	Teamsters.....	5
Dentists.....	1	Miners.....	5	Tinners.....	1
Domestics.....	5	Ministers.....	1	Unemployed.....	35
Draymen.....	5	Mill owners.....	1	Unknown.....	130
Druggists.....	2	Miscellaneous.....	9	Upholsterers.....	1
Engineers.....	5	Musicians.....	4	Waiters.....	1
Farmers.....	325	Painters.....	7	Weavers.....	3
Farmers' wives.....	3				
Total.....					1,105

Means Used.	No.	Means Used.	No.	Means Used.	No.
Burning.....	1	Insanity.....	1	Shooting.....	109
Cutting throat.....	23	Poison.....	169	Starving.....	1
Drowning.....	59	Run over by cars.....	2	Strangulation.....	2
Dynamite.....	1	Severing artery.....	3	Unknown.....	582
Hanging.....	152				
Total.....					1,105

TABLE 80.—CONTINUED.—*Suicidal Deaths.*

Nativity.	No.	Nativity.	No.	Nativity.	No.
Austria.....	1	Italy.....	1	Poland.....	3
Bohemia.....	1	Kentucky.....	1	Prussia.....	10
Canada.....	63	Maine.....	3	Rhode Island.....	1
Colorado.....	1	Massachusetts.....	5	Scotland.....	15
Connecticut.....	6	Michigan.....	260	Sweden.....	7
Delaware.....	1	Minnesota.....	1	Switzerland.....	2
Denmark.....	1	Netherlands.....	1	Texas.....	1
England.....	53	New Hampshire.....	3	United States.....	2
France.....	5	New Jersey.....	6	Unknown.....	84
Germany.....	208	New York.....	191	Vermont.....	15
Holland.....	5	Norway.....	1	Virginia.....	2
Illinois.....	3	Nova Scotia.....	2	Wisconsin.....	9
Indiana.....	9	Ohio.....	59	Zealand.....	2
Ireland.....	33	Pennsylvania.....	28		
Total.....					1,105

PRINCIPAL CAUSES OF DEATH.

TABLE 81.—*Mortality in Michigan from Fifteen Principal Causes, as Returned for the Year 1888.*

Order.	Specified Causes and Conditions, 1888.	Number of Deaths.				Per Cent from Each Cause to Deaths from all Causes.		
		Totals.	Males.	Females.	Unk.	Totals.	Males.	Females.
1	Consumption.....	2,424	1,103	1,321	.....	11.14	9.41	13.18
2	Still-born.....	1,358	809	534	15	6.24	6.90	5.33
3	Pneumonia.....	1,190	654	536	.....	5.47	5.58	5.35
4	Old age.....	1,174	586	588	.....	5.39	5.00	5.87
5	Heart disease.....	864	433	375	1	3.97	4.16	3.74
6	Cholera Infantum.....	767	410	357	.....	2.52	3.50	3.56
7	Diphtheria.....	717	370	347	.....	3.29	3.16	3.46
8	Apoplexy and Paralysis.....	697	337	310	.....	3.20	3.30	3.09
9	Fever, Typhoid.....	638	353	285	.....	2.93	3.01	2.84
10	Convulsions.....	516	295	221	.....	2.37	2.52	2.20
11	Cancer.....	490	193	287	.....	2.21	1.65	2.86
12	Croup.....	474	260	214	.....	2.18	2.22	2.13
13	Dropey.....	462	223	240	.....	2.12	1.89	2.39
14	Measles.....	414	192	221	1	1.90	1.64	2.20
15	Brain, Inflammation of.....	405	218	187	.....	1.86	1.86	1.87
	Totals.....	12,580	6,540	6,023	17	57.80	55.79	60.09
	All Causes.....	21,764	11,722	10,024	18	100.00	100.00	100.00

Table 81 gives the fifteen principal causes of death in 1888, arranged according to the order of their fatality. Consumption, as usual, held the first rank as a destroyer of Michigan lives. Since the beginning of registration, consumption has held first place each year, except in 1881, when diphtheria stood first. The per cent of deaths from consumption to deaths from all causes was 11.14 in 1888, 10.92 in 1887, 11.28 in 1886, 11.80 in 1885, 12.17 in 1884, and 11.78 in 1883. It is thus seen that consumption had about its usual proportion of deaths in 1888.

With the other causes of death, the order in regard to the largest number varies more or less from year to year. The most noteworthy change from 1887 was in diphtheria, which stood second in 1887 and now stands seventh in 1888. Pneumonia, occupying fifth place in 1887, rose to third place in 1888, while typhoid fever, which stood sixth in 1887, dropped back to ninth place in 1888. Measles, for the first time in the history of registration, occupies a place among the list of diseases in table 81.

Cancer maintains nearly a uniform rank from year to year. Diarrhea, which ranked twelfth in 1887, does not appear in 1888. Scarlet fever, which stood sixth in 1883, fell to fourteenth in 1884, since which time it has not appeared in the table.

The fifteen principal causes of death represent 57.80 per cent of the total mortality in 1888, as compared with 55.91 in 1887, 56.83 in 1886, 57.44 in 1885, 57.66 in 1884, and 56.92 in 1883.

MORTALITY FROM TEN PROMINENT CAUSES IN 1888.

In Tables 82 and 83 are presented the number and proportion of deaths from ten prominent causes in 1888. By these tables it appears that cancer and typhoid fever were the most destructive causes of death for all ages between 5 and 80 years. Diarrhea and whooping-cough were the most destructive causes among children under 5, and diphtheria and scarlet fever among children between 5 and 10 years of age. As usual, diphtheria proved to be the cause of the greatest mortality of the ten leading diseases included in the tables, although not the cause of the greatest mortality in the State. Dysentery occupied the lowest place, which was accorded to whooping-cough in 1887.

Among the many noteworthy features displayed in these tables may be mentioned the fatality of cancer at ages from forty to seventy and that each year many more females than males die of this disease. In 1888, cancer appears to have been especially fatal in the months of October and November. Cephalitis was most fatal in April, August and December and at ages under five years. Croup and diphtheria were most fatal during the fall and early winter and least so in summer. Measles and scarlet fever appear to have been most fatal during the spring months of 1888 and as usual, at ages under 10.

Diarrhea and Dysentery again attest the terrible inroads which are made each summer into infantile life by these fatal diseases. These diseases are of very little prominence until July and then fall off again in November, the greatest mortality being at the extremes of life, infancy and old age. In 1888, measles was a disease of more than usual prominence and occurred mostly in the months of April, May and June, and at ages under ten. The mortality from typhoid fever increased rapidly in August, reached its highest point in October and then declined again in December. More than a third of the decedents from this disease were between fifteen and thirty years of age, and the deaths among males exceeded those among females by about 11 per cent.

Many of these diseases will be considered on subsequent pages in connection with meteorological conditions.

TABLE 82.—Deaths from ten specified causes returned for the year 1888, exhibiting the number of each sex, total number in each month and at different periods of age.

Sex, Months and Ages.		Causes of Death, 1888.									
		Cancer.	Cepha- litis.	Croup. ^a	Diar- rhea. ^b	Diph- theria.	Dysen- tery. ^c	Measles.	Scarlet Fever.	Typhoid Fever.	Whoop- ing cough.
Sex.	Totals	480	405	474	371	717	153	414	323	638	174
	Males	198	218	260	206	370	68	192	170	353	69
	Females	287	187	214	165	347	85	221	153	285	105
	Unknown							1			
Months.	January	20	26	51	4	50	2	27	25	27	6
	February	32	18	31	3	61	1	35	21	31	7
	March	36	38	38	7	64	1	45	33	36	16
	April	40	48	38	9	49	1	64	35	42	11
	May	44	31	41	11	42	5	86	20	28	11
	June	47	26	18	28	59	9	60	25	19	13
	July	44	31	32	85	40	16	21	25	28	15
	August	44	47	34	98	55	45	21	20	62	20
	September	33	40	32	76	39	42	15	30	98	25
	October	49	31	50	23	94	21	15	26	134	19
	November	53	28	42	14	73	3	12	30	73	12
	December	37	41	66	13	91	7	13	33	59	19
	Unknown	1		1						1	
Av. Month ^d		40	34	40	31	60	13	35	27	53	15
Ages.	Under 5	11	225	411	333	356	95	280	205	57	166
	5 to 10	1	37	52	2	224	9	45	31	41	5
	10 to 15	2	20	5	1	73	2	14	19	63	3
	15 to 20	2	21	1	2	38	1	22	9	85	
	20 to 25	12	17		1	8		15	1	39	
	25 to 30	5	8		1	6		10	2	63	
	30 to 35	12	10		2	6	3		3	39	
	35 to 40	20	11		1		2	11	2	46	
	40 to 45	46	14		2		3	4		23	
	45 to 50	42	8		1	2	2	4		23	
	50 to 55	55	6		3	1	2	1		20	
	55 to 60	44	8		5	1	6	1		16	
	60 to 65	68	4		3		6			19	
	65 to 70	65	5				1			12	
	70 to 75	45	5		5		6	1		11	
	75 to 80	30	2	1	4		3			6	
	80 and over	16			5	1	11			4	
Unknown		4	4	4		1	1	6	1	11	

^a Includes 90 membranous croup.^b Includes 16 chronic.^c Includes 3 chronic.^d Excluding unknown month.

TABLE 83.—Per cent of Deaths returned for the year 1888, from each of ten specified causes to deaths from all causes, and per cent of each sex, of deaths in each month and at different periods of life, to total deaths from each specified cause.

Sex, Months and Ages.		Causes of Death, 1888.—Per Cent of Total.									
		Cancer.	Cepha- litis.	Croup.	Diar- rhea.	Diph- theria.	Dysen- tery.	Measles.	Scarlet Fever.	Typhoid Fever.	Whoop- ing- Cough.
Per cent of all causes...		2.21	1.86	2.18	1.70	3.29	.70	1.90	1.48	2.93	.80
Sex.	Males	40.21	53.88	54.85	55.53	51.60	44.44	46.38	52.63	55.33	39.66
	Females.....	59.79	46.17	45.15	44.47	48.40	55.56	53.98	47.37	44.67	60.34
	Unknown.....							.24			
Months.	January.....	4.17	6.42	10.76	1.08	6.97	1.31	6.52	7.74	4.23	3.45
	February.....	6.67	4.45	6.54	.81	8.51	.65	8.46	6.50	4.78	4.02
	March.....	7.50	9.38	8.02	1.89	8.93	.65	10.87	10.22	5.64	9.20
	April.....	8.33	11.85	8.02	2.43	6.83	.65	15.46	10.83	6.58	6.32
	May.....	9.17	7.66	8.65	2.96	5.86	3.27	20.78	6.19	4.39	6.32
	June.....	9.79	6.42	3.80	7.55	8.23	5.88	14.49	7.74	2.98	7.47
	July.....	9.17	7.65	6.75	22.91	5.58	10.46	5.07	7.74	4.39	8.62
	August.....	9.17	11.61	7.17	26.41	7.67	29.42	5.07	6.19	9.72	11.49
	September.....	6.87	9.88	6.75	20.49	5.44	27.45	3.62	9.29	15.36	14.37
	October.....	10.21	7.65	10.55	6.20	13.11	13.73	3.62	8.05	21.00	10.92
	November.....	11.04	6.91	8.86	3.77	10.18	1.96	2.90	9.29	11.44	6.90
	December.....	7.71	10.12	13.92	3.50	12.69	4.57	3.14	10.22	9.25	10.92
	Unknown.....	.20		.21						.16	
	Average month *...	8.33	8.40	8.44	8.36	8.37	8.50	8.45	8.36	8.81	8.62
Ages.	Under 5.....	2.29	55.56	86.71	89.75	49.65	62.09	67.63	63.47	8.04	95.40
	5 to 10.....	.21	9.14	10.97	.54	31.24	5.88	10.87	25.08	6.43	2.87
	10 to 15.....	.42	4.94	1.06	.27	10.18	1.31	3.38	5.88	9.87	1.73
	15 to 20.....	.42	5.19	.21	.54	5.30	.66	5.31	2.78	13.32	
	20 to 25.....	2.50	4.20		.27	1.12		3.62	.31	13.95	
	25 to 30.....	1.04	1.97		.27	.84		2.42	.62	10.66	
	30 to 35.....	2.50	2.47		.54	.83	1.96		.93	6.11	
	35 to 40.....	4.17	2.72		.27		1.31	2.66	.62	7.21	
	40 to 45.....	9.58	3.46		.54		1.96	.97		3.61	
	45 to 50.....	8.75	1.97		.27	.28	1.31	.97		4.39	
	50 to 55.....	11.46	1.43		.31	.14	1.31	.24		3.13	
	55 to 60.....	9.17	1.97		1.35	.14	3.92	.24		2.51	
	60 to 65.....	11.17	.99		.31		3.92			2.96	
	65 to 70.....	13.54	1.23				.65			1.88	
	70 to 75.....	9.37	1.23		1.35		3.92	.24		1.72	
	75 to 80.....	6.25	.49	.21	1.06		1.96			.94	
	80 and over.....	3.33			1.34	.14	7.19			.63	
	Unknown.....	.83	.99	.84		.14	.65	1.45	.31	1.72	

* Excluding deaths in unknown month.

MORTALITY FROM CANCER.

There were 480 deaths from cancer in 1888, as compared with 453 in 1887, 391 in 1886 and 403 in 1885. Table 84 shows the mortality from cancer, by sex and part of body affected so far as stated in the returns, for the 17 years, 1872-1888. The aggregate number of deaths from this disease for the above period of years was 5,105, being an average of 300 per year. With the exception of three years, 1882, 1884 and 1886, there has been a constant increase of deaths from this cause since 1871. The returns in 1888 give 27 more deaths than in 1887, and is the largest number ever reported from this cause. As usual, there were more deaths in 1888 among the females than among the males, the excess being 94, while the average excess for the seventeen years was 42.

In 1888, there was no great variation in the number of deaths by months in each half of the year, but there was quite an excess in the last half over the first, the deaths as returned being 209 for the first six months to 260 for the last six, or an excess of 41 in the last half. The largest number of deaths occurred in November and the least number in January.

Over 92 per cent of the deaths occurred between the ages of 30 and 80 years, and 33 deaths only occurred among persons under 30 years of age.

Of the deaths returned from cancer without definite statement as to the organs of the body affected, there were 2,513, nearly one-half. Of those, in which the particulars as to location were specified, cancer of the stomach had by far the largest number, while cancer of the breast was second.

TABLE 84.—Deaths from Cancer in Michigan Returned for the Years 1872-1888, Indicating Part of Body Affected.

Part Affected.	Total.	Males.	Females	Part Affected.	Total.	Males.	Females
Aggregate, Years 1872-1888....	5,105	2,196	2,909	Cancer of liver.....	111	62	49
Cancer of arm.....	6	3	3	Cancer of lungs.....	12	7	5
Cancer of bladder.....	12	10	2	Cancer of mouth.....	72	48	24
Cancer of bowels.....	107	39	68	Cancer of neck.....	22	15	7
Cancer of breast.....	342	23	319	Cancer of nose.....	2	2	-----
Cancer of ear.....	1	1	-----	Cancer of cesophagus...	3	1	2
Cancer of eye.....	15	7	8	Cancer of pancreas.....	3	2	1
Cancer of face.....	164	117	47	Cancer of rectum.....	17	10	7
Cancer of foot.....	3	3	-----	Cancer, rose.....	8	4	4
Cancer in groin.....	4	3	1	Cancer of shoulder.....	2	2	-----
Cancer of hand.....	3	2	1	Cancer of side.....	11	2	9
Cancer of head.....	30	18	12	Cancer of spine.....	5	2	3
Cancer of heart.....	4	2	2	Cancer of stomach.....	1,283	790	493
Cancer of hip.....	1	1	-----	Cancer of throat.....	62	34	28
Cancer, internal.....	31	9	22	Cancer of tongue.....	20	10	10
Cancer of kidneys.....	6	6	-----	Cancer (unspecified)....	2,513	950	1,563
Cancer of leg.....	16	11	5	Cancer of urethra.....	1	-----	1
				Cancer, uterus.....	213	-----	213

METEOROLOGY AND ITS RELATION TO DEATHS.

Each year there has been published in these reports some of the results of meteorological observations made by observers for the State Board of Health, the U. S. Signal Service, and at the State Agricultural College. The principal conditions exhibited in the following tables are temperature, humidity of the air, ozone, velocity of the wind and pressure of the atmosphere. Study is here made of the occurrence of deaths from different diseases in connection with the above conditions as observed at representative stations in Michigan during the same year and months.

Through the kindness of the Secretary of the State Board of Health, we have been allowed the use of these statistics.

Table 85 shows that the annual average temperature for 1888 was higher than that of any year since 1882, although not as high as that for the average for ten years. The month of August, 1888, was warmer than for any year since 1882, and the month of June was the hottest of any year of the table.

TABLE 85.—TEMPERATURE.—Average by years and by months, for the years 1879–1888, inclusive, at Representative stations in Michigan.

Years.	Annual Average.	Average Temperature, Stated in Degrees Fahrenheit, by Months.											
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1879 (19 stations)	46.82	20.86	20.69	33.08	44.29	58.03	64.70	73.16	68.99	57.43	57.43	36.80	26.41
1880 (15 stations)	46.55	34.06	27.93	31.00	44.39	62.27	67.41	69.39	68.07	59.54	46.69	27.24	20.67
1881 (20 stations)	47.22	14.93	19.75	29.36	40.53	62.72	63.32	72.95	71.76	67.99	51.87	37.42	34.03
1882 (22 stations)	47.14	24.32	33.42	34.12	42.65	51.04	64.43	67.84	69.05	61.70	53.53	37.90	25.72
1883 (19 stations)	43.52	15.78	20.03	24.63	43.00	51.37	64.73	68.36	65.41	57.34	46.73	38.10	26.89
1884 (20 stations)	44.72	15.14	20.94	23.78	42.00	54.38	67.04	66.70	66.10	64.72	51.56	34.53	24.77
1885 (21 stations)	42.36	15.46	10.21	19.51	41.39	53.32	63.39	71.13	63.23	59.14	45.78	38.14	27.59
1886 (17 stations)	44.82	18.72	21.18	30.10	46.04	54.69	63.31	68.68	67.36	61.15	51.84	34.32	30.44
1887 (17 stations)	44.82	16.58	21.57	25.55	42.09	60.68	66.53	73.22	66.41	57.95	44.46	35.18	27.57
1888 (13 stations)	45.03	15.93	21.65	25.89	42.81	53.40	68.03	70.95	68.05	58.20	46.01	38.73	30.73
Average for 10 years * ..	45.30	19.18	21.74	28.20	42.92	56.19	65.29	70.24	67.44	60.51	49.59	35.84	26.48

* Average for the ten years ending with 1888.

The Stations represented in the lines for average temperature for the years 1879–1888 in Table 85 are the following: Thornville, Kalamazoo, Lansing; Mendon for 1879–1882; Tecumseh for 1879, 1885 and 1888; Battle Creek for 1879, 1880, 1882, 1885, 1888; Nirvana 1879, and first 4 months of 1880; Reed City for last eight months of 1880 and 1881–1885; Coldwater, Ypsilanti, Woodmere Cemetery, Petoskey for 1879; Otisville for 1879, 1880, and 1881; Niles for 1879 and 1881; Marquette for 1879, 1884, 1886 and 1887; Alpena, Grand Haven, Port Huron, Detroit for 1879–1887; Washington for 1879–1883; Agricultural College for 1881–1888; Escanaba for 1880–1887; Harrisville for 1881 and 1882, 1885 and 1886; Ann Arbor for 1881–1888; Parkville for 1881 and 1882; Traverse City for 1882–1888; Hillsdale for 1882–1884; Marshall for 1882–1888; Winfield for 1881 and 1883; Hudson and Mallory Lake for 1881; Ionia for 1883–1885; Manistique, Swartz Creek for 1884 and 1885; Mackinaw City for 1884–1887; Port Austin for 1885 and 1888; Muskegon, Pentwater for 1886; Gulliver Lake, Birmingham, Otsego for 1887 and 1888.

TABLE 86.—PRESSURE OF THE ATMOSPHERE.—*Observations of barometers reduced to freezing point for each of the years 1879–1888, inclusive, and the average for ten years, at Representative stations in Michigan.*

Years.	No. of Stations.	Annual Average.	Pressure of the Atmosphere, Stated in Inches of Mercurial Column, by Months.											
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1879...	13	29.155	29.169	29.173	29.163	29.122	29.176	29.121	29.091	29.106	29.188	29.221	29.152	29.176
1880...	14	29.133	29.134	29.105	29.191	29.048	29.092	29.085	29.106	29.163	29.153	29.150	29.231	29.139
1881...	12	29.151	29.209	29.222	29.979	29.120	29.175	29.082	29.146	29.180	29.122	29.220	29.164	29.187
1882...	21	29.138	29.186	29.121	29.149	29.153	29.123	29.001	29.118	29.112	29.202	29.134	29.224	29.135
1883...	17	29.189	29.221	29.328	29.145	29.125	29.099	29.072	29.140	29.233	29.238	29.275	29.182	29.205
1884...	18	29.205	29.274	29.204	29.202	29.147	29.131	29.273	29.100	29.216	29.210	29.268	29.213	29.229
1885...	19	29.152	29.200	29.119	29.186	29.194	29.092	29.181	29.126	29.151	29.195	29.145	29.092	29.135
1886...	15	29.192	29.188	29.198	29.126	29.230	29.128	29.161	29.159	29.166	29.222	29.331	29.137	29.226
1887...	15	29.215	29.118	29.310	29.250	29.152	29.204	29.203	29.188	29.234	29.305	29.185	29.211	29.218
1888...	12	29.158	29.278	29.129	29.203	29.250	29.065	29.069	29.166	29.144	29.174	29.070	29.202	29.143
Average ^a ...		29.169	29.198	29.191	29.159	29.154	29.129	29.125	29.134	29.171	29.201	29.200	29.181	29.179

^a Average for ten years ending with 1888.

The Stations represented in the lines for average atmospheric pressure for the years 1879–1888 in Table 86 are the following: Lansing for 1879–1888; Kalamazoo for 1879–1882, and 1885–1888; Battle Creek for 1879, 1880, 1882, 1888; Detroit, Alpena, Grand Haven, Port Huron 1879–1887; Woodmere Cemetery, Ypsilanti for 1879; Mendon for 1881–1883; Marquette for 1879, 1884, 1886 and 1887; Agricultural College, Ann Arbor for 1881–1888; Otisville for 1879, 1880 and 1882; Tecumseh for 1879–1880 and 1882–1885; Washington 1879, 1880, 1882 and 1883; Nirvana for 1879, and first 4 months of 1880; Reed City for last 8 months of 1880–1885; Thornville for 1880–1881 and 1884–1888; Escanaba for 1880, 1882–1887; Traverse City for 1882–1888; Harrisville for 1882 and 1885–1888; Hastings for 1882; Hillsdale for 1882 and 1883; Port Austin for 1883, 1884 and 1888; Marshall for 1883–1888; Manistique 1884 and 1885; Mackinaw City for 1884–1887; Ionia for 1884 and 1885; Swartz Creek for 1885; Birmingham for 1888 and 1887; Gulliver Lake for 1888.

Croup—This disease was returned as the cause of 474 deaths in 1888, as compared with 399 in 1887, 400 in 1886, 337 in 1885, and is the greatest number ever reported in any one year.

The ratio of mortality from croup to the total mortality was 2.18 per cent, which was more than that of 1887 by .13 of one per cent, but slightly less than the proportion for 1886, although the number of deaths in 1888 was more than those in 1886 by 74.

The three most fatal months, in the order named were December, January and October and they contributed 167 of the 474 deaths. The greatest monthly mortality was in December, 13.95 per cent, and the least in June, 3.81 per cent. A very large portion of the mortality occurred among children under 5, the per cent in 1888 being 86.71.

Table 87 shows certain meteorological data in connection with deaths from croup. There were more exceptions to the propositions named than for the previous year.

TABLE 87.—Deaths returned from Croup in Michigan, by Months, during the Year 1888, and Certain Meteorological Conditions at Representative Stations in Michigan, during the same year and months.

Months in Order by Number of Deaths from Croup, greatest first.	Deaths from Croup, 1888.		Temperature, Degrees Fahr.		Humidity of Atmosphere, etc., Monthly Averages.				Ozone,— Relative Maximum =10,		Average Velocity of Wind,—Miles per hour,— by Registering Anemometer.		Average Pressure of Atmosphere (Barometer Re- duced to 32° Fahr.)
	Number.	Per cent of Total.	Average Daily Range by Registering Thermometers.	Average of Three Daily Observations.	Relative Per cent of Saturation.	Absolute Grains of Vapor in a cubic foot of Air, a	Weight in Troy Ounces of Vapor In- haled by one person in 24 hours, b	Weight in Troy Ounces of Vapor ex- haled from air passages in 24 hours in excess of vapor inhaled, c	Day,—7 a. m. to 2 p. m.	Night,—9 p. m. to 7 a. m.	Average Velocity of Wind,—Miles per hour,— by Registering Anemometer.	Average Pressure of Atmosphere (Barometer Re- duced to 32° Fahr.)	
Number of Stations in- cluded in Meteorolo- gical Averages.....	4473	100.00	15	13	9	9	9	9	9	9	7	12	
More than the Av. No. of Deaths.	December.....	66 13.95	11.28	30.73	83	1.92	1.20	10.48	4.57	5.05	12.0	29.143	
	January.....	51 10.78	15.28	15.93	90	1.25	.78	10.90	3.52	3.85	10.2	29.278	
	October.....	50 10.57	14.58	*46.01	76	3.05	1.91	9.77	4.33	4.31	10.1	29.070	
	November.....	42 8.88	13.47	38.73	79	2.49	1.56	10.12	3.61	3.61	10.2	29.202	
	May.....	41 8.67	18.04	*53.40	71	3.69	*2.31	9.37	5.57	5.53	9.1	29.065	
Average.....	39 8.33	17.42	45.03	77	3.31	2.07	9.61	4.20	4.29	9.8	29.158		
Less than the Average No. of Deaths.	March.....	38 8.03	17.73	*25.89	84	1.67	*1.04	10.64	4.03	4.27	11.4	29.203	
	April.....	38 8.03	18.70	*42.81	69	2.55	*1.59	10.09	4.75	4.98	10.6	29.250	
	August.....	34 7.19	20.21	68.05	72	5.59	3.49	8.19	3.77	3.73	8.6	29.144	
	July.....	32 6.77	20.68	70.95	71	5.95	3.72	7.96	3.15	3.04	7.3	29.166	
	September.....	32 6.77	20.33	58.20	74	4.30	2.69	8.99	4.40	4.07	8.8	29.174	
	February.....	31 6.55	17.70	*21.65	87	1.51	f .94	10.74	3.65	3.97	10.1	29.129	
	June.....	18 3.81	21.11	68.03	70	5.71	3.57	8.11	5.06	5.09	8.6	29.069	

a Calculated from readings of Dry Bulb and Wet Bulb thermometers.

b Calculated for 18 respirations per minute of 20 cubic inches of air each.

c Assuming the air exhaled to be saturated with vapor at the temperature of 98° F., each cubic foot containing 13.69 grains, 18 respirations per minute, of 20 cubic inches of air each, making 11.68 Troy ounces of vapor exhaled daily. No correction made for expansion of air after being inhaled.

d Includes 80 deaths from Membranous Croup, and excluding 1 death in unknown month.

e Exceptions to the proposition that more than an average number of deaths from croup occurred in months when the Average Daily Temperature was less than the average, and vice versa.

f Exceptions to the proposition that more than the average number of deaths from croup occurred in months when there was less than the average quantity of vapor inhaled, and vice versa.

Diphtheria.—This greatly dreaded disease caused the death of 717 persons in 1888. This number is 218 less than that reported in 1887 and is the smallest number returned since 1877. The average annual number returned for the twelve years, 1877–1888, was 1,156, and the number for each of these years is as follows:

1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.
598	887	1,473	1,542	2,063	1,416	1,007	1,065	1,054	1,117	985	717

The above table, giving the number of deaths from diphtheria annually since 1877, presents a good view of the periodicity of the epidemic influence which governs its activity. The steady increase in the number of deaths from diphtheria from 1877 to 1881 may here be observed as well as the gradual decline in the years since 1881.

In 1888 there were more deaths from diphtheria among males than among females, the same as in 1887, but the order is usually the reverse of this, with the females showing the largest number. The excess among the males in 1888 was 23.

The disease was most prevalent toward the end of the year, as appears from table 88. The months of October, November and December contributed 35.98 per cent of the deaths, the month of October leading with 94 deaths, or 13.11 per cent.

Over 80 per cent of the deaths from diphtheria in 1888 were those of children under ten years of age. Knowing, as we do by the census, the age-distribution in the population, we can determine the special death-rate from diphtheria at different ages.

According to the census of 1884 there were 225,973 children in Michigan under five years of age, and there were 356 deaths from diphtheria under that age. These numbers will give a mortality-rate of 1.58 per thousand. For ages under ten years the death-rate was 1.31 per thousand.

The following tabulated exhibit shows the relative prevalence of diphtheria, in 1888, in each of the eleven geographical divisions of the State. The two divisions having the highest and lowest per cent, respectively, were the southeastern and central divisions:

State and Geographical Divisions.	Total Mortality from all Causes.	Deaths from Diphtheria.	Per Cent of Deaths from Diphtheria to Deaths from all Causes.
State	21,764	717	3.29
Upper Peninsular	1,753	93	5.31
Northwestern	610	10	1.64
Northern	391	11	2.81
Northeastern	368	11	2.99
Western	2,165	42	1.94
Northern Central	686	10	1.46
Eastern	2,959	80	2.70
Central	2,347	30	1.28
Southwestern	1,273	37	2.91
Southern Central	2,885	69	2.39
Southeastern	6,327	324	5.12

Table 88 shows the number of deaths from diphtheria in 1888, by months, with certain coincident meteorological conditions. It will be observed that there were but three exceptions this year to the proposition that *more* than the average number of deaths from diphtheria occurred in months in which the temperature was *less* than the average, and *vice versa*.

TABLE 88.—Deaths returned from Diphtheria in Michigan, by Months, during the Year 1888, and some Coincident Meteorological Conditions, at Representative Stations in Michigan during the same Year and Months.

Months in Order by Number of Deaths from Diphtheria, Greatest first.	Deaths from Diphtheria, 1888.		Temperature, Degrees Fahr.		Humidity of Atmosphere, etc., Monthly Average.				Ozone, — Relative Maximum =10.		Average Velocity of wind, —miles per hour, — by Registering anemometer.	Average Pressure of Atmosphere, (Barometer Reduced to 32° Fahr.)
	Number.	Per cent of Total.	Average Daily Range by Registering Thermometer.	Average of Three Daily Observations.	Relative Per cent of Saturation.	Absolute Grains of Vapor in a cubic foot of Air, ^a	Weight in Troy Ounces of Vapor In- haled by one person in 24 hours. ^a	Weight in Troy Ounces of Vapor Ex- haled from air passages in 24 hours in excess of Vapor inhaled, ^a	Day, —7 a. m. to 2 p. m.	Night, —9 p. m. to 7 a. m.		
Number of Stations in- cluded in Meteorolog- ical Averages.....	717	100.00	15	13	9	9	9	9	9	9	7	12
More than the av- erage No. of deaths.	October	94 13.11	14.58	46.01	76	3.05	1.91	9.77	4.33	4.31	10.1	29.070
	December	91 12.69	11.28	30.73	83	1.92	1.20	10.48	4.57	5.05	12.0	29.143
	November.....	73 10.18	13.47	38.73	79	2.49	1.56	10.12	3.61	3.61	10.2	29.202
	March.....	64 8.93	17.73	25.89	84	1.67	1.04	10.84	4.03	4.27	11.4	29.203
	February	61 8.51	17.70	21.65	87	1.51	.94	10.74	3.65	3.97	10.1	29.129
Average	60	8.33	17.42	45.03	77	3.31	2.07	9.61	4.20	4.29	9.8	29.158
Less than the average No. of deaths.	June.....	59 8.23	21.11	68.03	70	5.71	3.57	8.11	5.06	5.09	8.6	29.069
	August	55 7.67	20.21	68.05	72	5.59	3.49	8.19	3.77	3.73	8.6	29.144
	January.....	50 6.97	15.28	15.93	90	1.25	0.78	10.90	3.52	3.85	10.2	29.278
	April	49 6.83	18.70	42.81	69	2.55	1.59	10.09	4.75	4.98	10.6	29.250
	May	42 5.86	18.04	53.40	71	3.69	2.31	9.37	5.57	5.53	9.1	29.065
	July	40 5.58	20.68	70.95	71	5.95	3.72	7.96	3.15	3.04	7.3	29.166
	September.....	39 5.44	20.33	58.20	74	4.30	2.69	8.99	4.40	4.07	8.8	29.174

^a See foot-notes to Table 87, page 224.

^b Exceptions to the proposition that *more* than an average number of deaths from Diphtheria occurred in months when the Average Daily Temperature was *less* than the average, and *vice versa*.

^c Exceptions to the proposition that *more* than an average number of deaths from Diphtheria occurred in months when *less* than the average quantity of vapor was inhaled, and *vice versa*.

Typhoid Fever—There were 638 deaths from this disease in 1888, 132 less than the number returned in 1887, but 140 more than were reported in 1886, and 119 more than the annual average for the ten years, 1878–1887. The percentage of deaths from typhoid fever to deaths from all causes in 1888 was 2.93, which was 1.02 per cent less than in 1887.

There were 353, or 55 per cent of deaths among males, and 285, or 45 per cent among females, and each year, except 1879, the mortality among the males exceeds that among the females, the average per cent of difference being eight.

A little more than half of the mortality, 57.61 per cent, occurred in the months of August, September, October and November, and more than a third of the deaths, 36.42 per cent, occurred in September and October. Usually, September is the month of

greatest mortality, but in 1888, October leads with 134, or 21.04 per cent of the total deaths. The propriety of calling the disease "autumnal fever" is thus well illustrated.

About 38 per cent of the deaths from typhoid fever, in 1888, were of persons between 15 and 30 years of age, and more than 27 per cent were between 15 and 25 years old.

Table 89 shows the relation of deaths from typhoid fever to certain atmospheric conditions during the year 1888.

TABLE 89.—Deaths returned in Michigan from Typhoid Fever, by Months, during the Year 1888, and some Coincident Meteorological Conditions, at representative stations in Michigan during the same year and months.

Months in Order by number of Deaths from Typhoid Fever, greatest first.	Deaths from Typhoid Fever, 1888.		Temperature, Degrees Fahr.		Humidity of Atmosphere, etc.—Monthly Averages.				Ozone.— Relative Maximum =10.		Average velocity of wind,—miles per hour,—by registering anemometer.	Average pressure of atmosphere, (Barometer re- duced to 32° Fahr.)
	Number.	Per cent of total.	Average daily range by registering thermometer.	Average of three daily observations.	Relative per cent of saturation.	Absolute grains of vapor in a cubic foot of air. ^a	Weight in Troy ounces of vapor in- haled by one person in 24 hours. ^a	Weight in Troy ounces of vapor ex- haled from air passages in 24 hours in excess of vapor inhaled. ^a	Day,—7 a. m. to 2 p. m.	Night,—9 p. m. to 7 a. m.		
Number of Stations in- cluded in Meteorologi- cal Averages.	*637	100.00	15	13	9	9	9	9	9	9	7	12
More than the Av. No. of Deaths.												
October	134	21.04	b 14.58	46.01	76 d	3.05	1.91	9.77	e 4.33	e 4.31	10.1	f 29.070
September	98	15.38	b 20.33	58.20	74 d	4.30	2.69	8.99	e 4.40	4.07	8.8	29.174
November	73	11.46	b 13.47	c 38.73	79 d	2.49	1.56	10.12	3.61	3.61	10.2	29.202
August	62	9.73	b 20.21	68.05	72 d	5.59	3.49	8.19	3.77	3.73	8.6	f 29.144
December	59	9.26	b 11.28	c 30.73	83 d	1.92	1.20	10.48	e 4.57	e 5.05	12.0	f 29.148
Average	53	8.33	17.42	45.03	77	3.31	2.07	9.61	4.20	4.29	9.8	29.158
Less than the average No. of Deaths.												
April	42	6.59	b 18.70	42.81	69	2.55	1.59	10.09	4.75	4.98	10.6	f 29.250
March	36	5.65	b 17.73	25.89	84	1.67	1.04	10.64	e 4.03	e 4.27	11.4	f 29.208
February	31	4.87	b 17.70	21.65	87	1.51	.94	10.74	e 3.65	e 3.97	10.1	29.129
May	28	4.40	b 18.04	c 53.40	71 d	3.69	2.31	9.37	5.57	5.53	9.1	29.065
July	28	4.40	b 20.68	c 70.95	71 d	5.95	3.72	7.96	e 3.15	e 3.04	7.3	f 29.166
January	27	4.24	15.28	15.93	90	1.25	.78	10.90	e 3.52	e 3.85	10.2	f 29.278
June	19	2.98	b 21.11	c 68.03	70 d	5.71	3.57	8.11	5.06	5.09	8.6	29.069

^a See foot-notes to Table 87, page 224.

^b Exceptions to the proposition that the Average Daily Range of Temperature was *greater* than the average in months when *more* than the average number of deaths occurred, and *vice versa*.

^c Exceptions to the proposition that the Average Daily Temperature was *greater* than the average in months when *more* than the average number of deaths occurred, and *vice versa*.

^d Exceptions to the proposition that the Absolute Humidity was *greater* than the average in months when *more* than the average number of deaths occurred, and *vice versa*.

^e Exceptions to the proposition that the Ozone was *less* than the average in months when *more* than the average number of deaths occurred, and *vice versa*.

^f Exceptions to the proposition that the Atmospheric Pressure indicated by the Barometer was *greater* than the average in months when *more* than the average number of deaths occurred, and *vice versa*.

* Excluding 1 death in unknown month.

Diarrheal Diseases—The number of deaths from this class of diseases for each of the years, 1877–1888, may be seen in Table 90. In 1888, there were 114 more deaths than were returned in 1887 and 376 more than the average for the twelve years, 1877–1888. The increase over that for 1887 is mainly due to cholera infantum, while diarrhea and dysentery show a decrease from the number reported in 1887, the former of 43 and the latter of 30. The sum of this group of diseases, 1,733, was about 8 per cent of the total mortality from all causes, the same as in 1887.

TABLE 90.—Deaths returned from Diarrheal Diseases in Michigan during the Years 1877–1888, and the Average.

Years.	Diarrhea.	Dysentery.	Cholera Infantum.	Cholera Morbus.	Enteritis.	Diarrheal Diseases.
1877.....	290	218	370	41	226	1,145
1878.....	178	158	243	27	214	815
1879.....	226	135	300	36	237	934
1880.....	310	160	499	64	267	1,300
1881.....	501	270	857	86	342	2,056
1882.....	259	96	428	50	276	1,109
1883.....	267	114	465	27	294	1,167
1884.....	409	160	781	50	350	1,750
1885.....	261	105	360	42	324	1,092
1886.....	378	158	653	42	327	1,558
1887.....	414	183	626	57	339	1,619
1888.....	371	153	767	52	390	1,733
Average.....	322	159	529	48	299	1,357

Cholera Infantum—The returns for 1888 show a decided increase in the mortality from this disease, there being 767 deaths as compared with 626 in 1887. The annual average of mortality for the twelve years, 1877–1888, was 529, which is 238 less than that reported for 1888. The mortality from cholera infantum in 1888 comprised 3.52 per cent of the total deaths from all causes.

Deaths were recorded in every month, but the months of July, August and September contributed 561, or 73.14 per cent of the total deaths, the month of August standing at the head with 271, or 35.33 per cent of the deaths to its account. The third quarter of the year has always been the season of greatest mortality in Michigan, and August is usually the most unfavorable of all the months.

As compared with the population living under five years of age, according to the census of 1884, the ratio of mortality from cholera infantum in 1888 was 3.4 per thousand. There were 410 deaths among males from this cause and 357 among females.

TABLE 91.—Deaths returned in Michigan from Diarrhea, by Months, during the Year 1888, and some Coincident Meteorological Conditions.

Months in Order by Number of Deaths from Diarrhea, greatest first.	Deaths from Diarrhea, 1888.		Temperature. Degrees Fahr.		Humidity of Atmosphere, etc., Monthly Averages.				Ozone,—Rel- ative Maxi- mum = 10.		Average velocity of wind,—miles per hour,—by registering anemometer.	Average pressure of atmosphere, (Barometer re- duced to 32° Fahr.)
	Number.	Per cent of total.	Average daily range by registering thermometers.	Average of three daily observations.	Relative per cent of saturation.	Absolute grains of vapor in a cubic foot of air. a	Weight in Troy ounces of vapor in- haled by one person in 24 hours. a	Weight of Troy ounces of vapor ex- haled from air passages in 24 hours in excess of vapor inhaled. a	Day,—7 A. M. to 2 P. M.	Night,—9 P. M. to 7 A. M.		
Number of Stations included in Meteorological Averages.	371	100.00	15	13	9	9	9	9	9	9	7	12
More than the Av. No. of Deaths.												
August	98	26.41	20.21	68.05	72	5.59	3.49	8.19	3.77	3.73	8.6	g 29.144
July.....	85	22.91	20.68	70.95	71	5.95	3.72	7.96	3.15	3.04	7.3	29.166
September.....	76	20.49	20.33	58.20	74	4.30	2.69	8.99	f 4.40	4.07	8.8	29.174
Average.....	81	8.33	17.42	45.03	77	3.31	2.07	9.61	4.20	4.29	9.8	29.158
Less than the Average Number of Deaths.												
June	28	7.55	b 21.11	c 68.03	d 70	e 5.71	3.57	8.11	5.06	5.09	8.6	29.069
October	23	6.20	14.58	e 46.01	d 76	3.05	1.91	9.77	4.33	f 4.31	10.1	29.070
November.....	14	3.77	13.47	38.73	79	2.49	1.56	10.12	f 3.61	f 3.61	10.2	g 29.202
December	13	3.50	11.28	30.73	83	1.92	1.20	10.48	4.57	5.05	12.0	29.143
May	11	2.96	b 18.04	c 53.40	d 71	e 3.69	2.31	9.37	5.57	5.53	9.1	29.065
April	9	2.43	b 18.70	42.81	d 69	2.55	1.59	10.09	4.75	4.98	10.6	g 29.250
March.....	7	1.89	b 17.73	25.89	84	1.67	1.04	10.64	f 4.03	f 4.27	11.4	g 29.203
January.....	4	1.08	15.28	15.93	90	1.25	.78	10.90	f 3.52	f 3.85	10.2	g 29.278
February	3	.81	b 17.70	21.65	87	1.51	.94	10.74	f 3.65	f 3.97	10.1	29.129

a See foot-notes to Table 87, page 224.

b Exceptions to the proposition that more than the average number of deaths from Diarrhea occurred in months when the Average Daily Range of Temperature was greater than the Average, and vice versa.

c Exceptions to the proposition that more than the average number of deaths from Diarrhea occurred in months when the average Daily Temperature was higher than the average, and vice versa.

d Exceptions to the proposition that more than the average number of deaths from Diarrhea occurred in months when the Relative Humidity of the Atmosphere was less than the average, and vice versa.

e Exceptions to the proposition that more than the average number of deaths from Diarrhea occurred in months when the Absolute Humidity of the Atmosphere was greater than the average, and vice versa.

f Exceptions to the proposition that more than the average number of deaths from Diarrhea occurred in months when the amount of Ozone in the Atmosphere was less than the average, and vice versa.

g Exceptions to the proposition that more than the average number of Deaths from Diarrhea occurred in months when the Average Daily pressure of the Atmosphere was greater than the average, and vice versa.

Diarrhea—The number of deaths from this cause in 1888 was 371, a decrease of 43 from the mortality in 1887, but 49 more than the average for the twelve years, 1877–1888. The ratio of deaths to the total mortality was 1.70, as compared with 2.13 per cent in 1887, 2.08 in 1886, 1.57 in 1885, and 2.27 in 1884.

There were 206, or 55.53 per cent of the deaths among males and 165, or 44.47 per cent of the deaths among females. More than two-thirds of the deaths occurred in the three months of July, August and September and more than one-fourth of the total mortality was recorded in August.

As may be seen from Table 83, more than five-sixths of the deaths were those of children under five years old. As compared with the population living under five years of age, according to the census of 1884, the ratio of mortality from diarrhea in 1888 was 15 per 10,000, or 667 children living under five years old to every death under that age.

Table 91 shows the relation which the deaths from diarrhea sustained to certain atmospheric conditions in 1888.

Dysentery—The number of deaths from dysentery in 1888 was 153, which was 30 less than that of 1887 and 6 less than the average for the twelve years, 1877–1888. Eighty-one per cent of the mortality was in the four months of July, August, September and October, August alone having a record of 29.42 per cent. Sixty-two per cent of the deaths were those of children under five years old, and 23 per cent were of persons over fifty years of age.

As compared with the population living at the extremes of infancy and old age, or children under five years of age and persons 80 years and over, the ratio of mortality from dysentery in 1888 was as follows: for those under 5, the ratio was 4.20 per 10,000, for those 80 and over, the ratio was 14.30 per 10,000. From this it appears that the relative mortality from this disease is greater for aged persons than for young children.

Scarlet Fever—The number of deaths returned from scarlet fever in 1888 was 323, which was five more than that of 1887, four more than that of 1886 and also more than that of any year since 1884. The years having the largest number of deaths from scarlet fever were 1870 with 852, 1871 with 696, and 1883 with 673. The average annual number for the 18 years, 1870–1887, was 468.

The ratio of mortality from scarlet fever to the deaths from all causes was 1.48 per cent, which was less than that of 1887, 1886, 1884, and 1883, but greater than that for 1885.

The deaths were quite uniformly distributed throughout the different months of 1888, the months of April, March and December leading with nearly a third of the deaths to their credit.

The very great degree to which the disease selects its victims from among young children is again illustrated in the 63 per cent of all the deaths in 1888 being those of children under five years of age, and 88 per cent, those of children under ten years of age.

As compared with the number of children living under the ages of five and ten years the ratios were as follows: for children under 5 years of age, 9.1 per 10,000, for those between the ages of 5 and 10 years, 3.7 per 10,000, while for all children under 10 years, the ratio was 6.4 per 10,000.

In 1888 there were only three exceptions to the proposition that the average daily temperature was *lower* than the average in months in which *more* than the average number of deaths from scarlet fever occurred, and *vice versa*.

TABLE 92.—Deaths returned in Michigan from Scarlet Fever, by Months, during the Year 1888, and some Coincident Meteorological Conditions, at Representative Stations in Michigan during the same year and months.

Months in Order by Number of Deaths from Scarlet Fever, greatest first.	Deaths from Scarlet Fever, 1888.		Temperature, Degrees Fahr.		Humidity of Atmosphere, etc., Monthly Averages.				Ozone.— Relative Maximum =10.		Average velocity of wind,—miles per hour,—by registering anemometer.	Average pressure of atmosphere, (Barometer reduced to 32° Fahr.)	
	Number.	Per cent of total.	Average daily range by registering thermometers.	Average of three daily observations.	Relative per cent of saturation.	Absolute grains of vapor in a cubic foot of air, a	Weight in Troy ounces of vapor in- haled by one person in 24 hours, a	Weight in Troy ounces of vapor ex- haled from air passages in 24 hours in excess of vapor inhaled, a	Day,—7 a. m. to 2 p. m.	Night,—9 p. m. to 7 a. m.			
Number of Stations in- cluded in Meteorologi- cal Averages.....	323	100.00	15	13	9	9	9	9	9	9	7	12	
More than the Av. No. of D'ths.	April.....	35	10.84	18.70	42.81	89	2.55	1.59	10.09	4.75	4.98	10.6	29.250
	March.....	38	10.22	17.73	25.89	84	1.67	1.04	10.64	4.08	4.27	11.4	29.208
	December.....	33	10.21	11.28	30.73	83	1.92	1.20	10.48	4.57	5.05	12.0	29.148
	September.....	30	9.29	20.33	b 58.20	74	c 4.30	2.69	8.99	4.40	4.07	8.8	29.174
	November.....	30	9.29	13.47	38.73	79	2.49	1.56	10.12	3.61	3.61	10.2	29.202
Average.....	27	8.33	17.42	45.08	77	3.31	2.07	9.61	4.20	4.29	9.8	29.158	
Less than the Average No. of Deaths.	October.....	26	8.05	14.58	46.01	76	c 3.05	1.91	9.77	4.33	4.31	10.1	29.070
	January.....	25	7.74	15.28	b 15.98	90	c 1.25	.78	10.90	3.52	3.85	10.2	29.278
	June.....	25	7.74	21.11	68.08	70	5.71	3.57	8.11	5.06	5.09	8.6	29.069
	July.....	25	7.74	20.68	70.95	71	5.95	3.72	7.96	3.15	3.04	7.3	29.166
	February.....	21	6.50	17.70	b 21.65	87	c 1.51	.94	10.74	3.65	3.97	10.1	29.129
	May.....	20	6.19	18.04	53.40	71	3.69	2.31	9.37	5.57	5.53	9.1	29.065
	August.....	20	6.19	20.21	68.05	72	5.59	3.49	8.19	3.77	3.73	8.6	29.144

^a See foot-notes to Table 87, page 224.

^b Exceptions to the proposition that the Average Daily Temperature was lower than the average in months when more than the average number of deaths from Scarlet Fever occurred, and *vice versa*.

^c Exceptions to the proposition that the Absolute Humidity of the atmosphere was less than the average in months when more than the average number of deaths from Scarlet Fever occurred, and *vice versa*.

Consumption—This expressive word, representing the group of wasting pulmonary diseases, still maintains its conspicuous place at the head of the list of causes of death in Michigan. In 1888, consumption was returned as the cause of 2,424 deaths, a number 297 greater than was attributed to this cause in 1887. The average annual mortality from this disease for the 20 years, 1869–1888, was 1,734. This average is 36 more than was given for the 19 years in the report for 1887.

Of the 2,424 deaths from consumption in 1888, 1,103 were males and 1,321 were females, or there were 84 male decedents to 100 female decedents. For the 20 years from 1869 to 1888, inclusive, the total number of deaths returned from consumption in Michigan was 34,688, of which 16,067 were males and 18,621 were females. This gives 86 male decedents to each 100 female decedents for the aggregate of these years, or 46 males and 54 females in each 100 decedents. The ratio of deaths of females to males from this cause is larger even than the numbers mentioned represent, because of the excess of the male over the female population in Michigan. In-door occupation, and the absence of the necessary consideration of ventilation, probably accounts for a certain portion of the excess of deaths among the females.

The following tabular exhibits show the influence which the different months and seasons have in promoting the fatality of consumption. In 1888 the largest number of deaths occurred in March, a month which has repeatedly had the same fact recorded concerning it in former years. The month of April very frequently has the largest mortality from this disease, which is no doubt due to its changeable temperature and its dampness, which is also true in regard to the month of March. For the twenty years, the highest monthly mortality appears for April and December, and the lowest for January and February. The highest quarterly mortality was in the second corresponding to the record for a single year.

The comparison, with reference to ages, shows that the mortality from consumption bears most heavily upon the middle-aged and those past the prime of life. In 1888, over 25 per cent of the deaths were of persons between 20 and 30 years of age, and more than 26 per cent of the deaths occurred between the same ages for the twenty-year record. There appears but little difference in the relative proportion of the various periods of life between the aggregate record and that for a single year. As compared with the living population the death-rate from consumption is seen to be highest at ages between 60 to 80.

It will be interesting to note the comparative mortality from consumption to the living population at the time of the next census. We should like to know whether there has been an improvement as regards the destructiveness of the disease in recent years. The death-rate from consumption in 1880 was 11.3 per 10,000, of the living population and in 1884, it was 11.9 per 10,000.

Table 93 shows the relation of the deaths from consumption in 1888 to certain atmospheric conditions.

Mortality from Consumption by Months and Quarters, 1888.

Months.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Unk.
	167	184	241	222	236	166	201	214	198	204	211	177	8
Quarters.	7,592			624			608			592			8
Per cent.	24.42			25.75			25.08			24.42			.33

Total Mortality from Consumption, by Sex, Months, and Age, 1869-1888.

	Sex.		Totals.	Months.												
	Males.	Females.		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
Males.....	16,067			972	1,102	1,481	1,514	1,502	1,271	1,287	1,339	1,401	1,313	1,333	1,499	53
Females.....		18,621		1,093	1,293	1,601	1,710	1,698	1,490	1,531	1,604	1,701	1,584	1,522	1,721	73
Totals.....			34,688	2,065	2,395	3,082	3,224	3,200	2,761	2,818	2,943	3,102	2,897	2,855	3,220	126
Quarters.....				7,542			9,185			8,863			8,972			126
Per cent.....				21.74			26.48			25.56			25.96			.36
	Ages.															
	Under 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 and over.	Unknown.				
Males	1,153	197	234	965	8,696	2,685	2,091	1,838	1,753	1,011	185	259				
Females.....	1,099	222	552	2,176	5,435	3,280	2,009	1,471	1,205	754	148	270				
Totals.....	2,252	419	786	3,141	9,131	5,965	4,100	3,309	2,958	1,765	333	529				
Per cent.....	6.49	1.21	2.27	9.06	26.32	17.19	11.82	9.54	8.53	5.09	.96	1.52				

Mortality from Consumption, by Sex, and Ages, 1888.

Ages.	Deaths from all Causes.	Deaths from Consumption.	Per cent at Several Ages.	Males.	Females.	Per cent of Deaths from Consumption to Population.
Under 10.....	9,361	177	7.30	82	95	.040
10 to 20.....	1,397	300	12.33	92	208	.079
20 to 30.....	1,854	621	25.62	286	355	.176
30 to 40.....	1,474	450	18.56	200	250	.176
40 to 50.....	1,338	293	12.99	155	138	.160
50 to 60.....	1,364	215	8.87	108	107	.173
60 to 70.....	1,793	200	8.25	108	92	.271
70 to 80.....	1,896	111	4.58	58	53	.361
80 and over.....	1,042	29	1.20	16	13	.377
Age not stated.....	395	28	1.15	18	10	1.691
Totals.....	21,764	2,424	100.00	1,108	1,321	.131

TABLE 93.—CONSUMPTION.—Deaths from Consumption returned in Michigan, by Months, during the Year 1888, and some Coincident Meteorological Conditions, at Representative Stations in Michigan during the same year and months.

Months in Order by Number of Deaths from Con- sumption, greatest first.	Deaths from Consumption, 1888.		Temperature, Degrees Fahr.		Humidity of Atmosphere, etc., Monthly Averages.				Ozone,—Rela- tive Maxi- mum =10.		Average velocity of wind,—miles per hour,—by registering anemometers.		Average pressure of atmosphere (Barometer re- duced to 32° Fahr.)
	Number.	Per cent of total.	Average daily range by registering thermometers.	Average of three daily observations.	Relative per cent of saturation.	Absolute grains of vapor in a cubic foot of air. a	Weight in Troy ounces of vapor in- haled by one person in 24 hours. a	Weight in Troy ounces of vapor ex- haled from air passages in 24 hours in excess of vapor inhaled. a	Day,—7 A. M. to 2 P. M.	Night,—9 P. M to 7 A. M.			
No. Stations included in } Meteorological Av'r'g's }	62,416	100.00	15	13	9	9	9	9	9	9	7	12	
More than the Average No. of Deaths.	March	241	9.97	17.73	c 25.89	84	1.67	d 1.04	10.64	4.03	4.27	11.4	29.208
	May	236	9.77	18.04	53.40	71	3.69	2.31	9.87	5.57	5.53	9.1	29.065
	April	222	9.19	18.70	c 42.81	69	2.55	d 1.50	10.09	4.75	4.98	10.6	29.250
	August	214	8.86	20.21	68.05	72	5.59	3.49	8.19	3.77	3.73	8.6	29.144
	November	211	8.73	13.47	c 38.73	79	2.49	d 1.56	10.12	3.61	3.61	10.2	29.202
	October	204	8.44	14.58	46.01	76	3.05	d 1.91	9.77	4.33	4.31	10.1	29.070
Average	201	8.33	17.42	45.03	77	3.31	2.07	9.61	4.20	4.29	9.8	29.158	
Less than the Average No. of Deaths.	July	201	8.32	20.68	c 70.95	71	5.95	d 3.72	7.96	3.15	3.04	7.3	29.166
	September	193	7.99	20.33	c 58.20	74	4.30	d 2.69	8.99	4.40	4.07	8.8	29.174
	February	184	7.62	17.70	21.65	87	1.51	.94	10.74	3.65	3.97	10.1	29.129
	December	177	7.33	11.28	30.73	83	1.92	1.20	10.48	4.57	5.05	12.0	29.143
	January	167	6.91	15.28	15.93	90	1.25	.78	10.90	3.52	3.85	10.2	29.278
	June	166	6.87	21.11	c 68.03	70	5.71	d 3.57	8.11	5.06	5.09	8.6	29.069

a See foot-notes to Table 87, page 224.

b Excluding 8 deaths in unknown months.

c Exceptions to the proposition that the Average Daily Temperature was *higher* than the average in months when *more* than the average number of deaths from Consumption occurred, and *vice versa*.

d Exceptions to the proposition that *more* than the average amount of vapor was inhaled in months in which there was *more* than the average number of deaths from Consumption, and *vice versa*.

Pneumonia—This disease was returned as the cause of 1,190 deaths in 1888. This number is larger by 306 than that reported in 1887, and is the largest number ever reported in the State. The average annual number of deaths from this cause for the twenty years, 1869–1888, was 692, while the average for the ten years, 1879–1888, was 815. The percentage of deaths from pneumonia to deaths from all causes, in 1888, was 5.47, while the average percentage for the twenty years 1869–1888, was 4.66.

Each year there are more deaths returned among males than among females, the

figures, in 1888, being 654 males and 536 females, or an excess of 118 male decedents. In this respect the disease is the reverse of consumption.

In 1888, February and March were the two most fatal months, but for the average for ten years March and April show the greatest number of deaths. Nearly one-half the deaths are returned in the first four months of the year. The difference between the mortality of the first six months and the last six months of 1888 was quite marked being 361.

As regards age, 442 of the whole number, or 37.14 per cent, occurred in 1888 under the age of five years, as compared with 348, or 39.25 per cent in 1887, and 326, or 41.63 per cent in 1886. Three hundred and seventy-seven, or 31.68 per cent of the deaths from pneumonia, were of persons over 50 years of age.

The ratio of mortality from pneumonia in 1888 to population living at the same age was as follows: for those under 5 years of age, 19.6 to every 10,000, for those aged 5 to 50 the rate was 2.5 per 10,000, while for those aged 50 and over it was 15.9 to every ten thousand.

Thus it is seen that while pneumonia attacks all ages, its fatality is greatest at the extremes of life when the strength and vitality of its victims are less able to withstand the disease.

Table 95 shows the relation of deaths from pneumonia to certain atmospheric conditions in 1888. It appears that there were only three exceptions to the proposition that the Average Daily Temperature was *lower* than the average in months in which *more* than the average number of deaths from pneumonia occurred and *vice versa*.

TABLE 94.—*By Months, the number of deaths returned from Pneumonia in Michigan during each of the Years 1879–1888, and the average for ten years ending with 1888.*

Years.	Totals.	Deaths from Pneumonia, 1879-1888.												
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
1879.....	701	44	92	114	102	59	36	30	31	42	25	45	80	1
1880.....	812	56	82	111	113	79	37	29	36	51	44	68	105	1
1881.....	805	77	88	126	100	70	37	39	29	47	55	43	91	3
1882.....	735	59	65	84	82	94	58	29	29	36	43	57	97	2
1883.....	737	76	61	97	104	89	40	30	42	27	41	53	76	1
1884.....	767	68	101	106	83	67	39	34	42	34	30	70	90	3
1885.....	733	65	100	122	86	66	34	26	26	41	45	43	78	1
1886.....	788	57	62	113	100	63	48	32	28	36	46	76	121	1
1887.....	884	87	112	122	113	75	44	28	36	52	64	66	84	1
1888.....	1,190	96	153	181	143	128	74	36	37	68	68	74	131	1
Average for 10 Years.....	815	68	92	118	103	79	45	31	34	43	46	59	95	2

TABLE 95.—Deaths returned from Pneumonia in Michigan during the Year 1888, and some Coincident Meteorological Conditions at Representative Stations in Michigan during the same year and months.

Months in Order by Number of Deaths from Pneumonia, greatest first.	Deaths from Pneumonia, 1888.		Temperature, Degrees Fahr.		Humidity of Atmosphere, etc., Monthly Averages.				Ozone,— Relative Maximum =10.		Average velocity of wind,—miles per hour,—by registering anemometer.	Average pressure of atmosphere, (Barometer reduced to 32° Fahr.)	
	Number.	Per cent of total.	Average daily range by registering thermometers.	Average of three daily observations.	Relative per cent of saturation.	Absolute grains of vapor in a cubic foot of air, a	Weight in Troy ounces of vapor in- haled by one person in 24 hours, a	Weight in Troy ounces of vapor ex- haled from air passages in 24 hours in excess of vapor inhaled, a	Day,—7 a. m. to 2 p. m.	Night,—9 p. m. to 7 a. m.			
Number of Stations in- cluded in Meteorologi- cal Averages.....	*1,189	100.00	15	13	9	9	9	9	9	9	7	12	
More than the Av. No. of D'ths.	March	181	15.22	17.73	25.89	84	1.67	1.04	10.64	4.03	4.27	11.4	29.203
	February	153	12.87	17.70	21.65	87	1.51	.94	10.74	3.65	3.97	10.1	29.129
	April	143	12.03	18.70	42.81	69	2.55	1.59	10.09	4.75	4.98	10.6	29.250
	December	131	11.02	11.28	30.73	83	1.92	1.20	10.48	4.57	5.05	12.0	29.143
	May	128	10.77	18.04	b 53.40	71	3.69	c 2.31	9.37	5.57	5.53	9.1	29.065
Average	99	8.33	17.42	45.03	77	3.31	2.07	9.61	4.20	4.29	9.8	29.158	
Less than the Average No. of Deaths.	January	96	8.07	15.28	b 15.93	90	1.25	c .78	10.90	3.52	3.85	10.2	29.278
	November	74	6.22	13.47	b 38.73	79	2.49	c 1.56	10.12	3.61	3.61	10.2	29.202
	June	74	6.22	21.11	68.03	70	5.71	3.57	8.11	5.06	5.09	8.6	29.069
	September	68	5.72	20.33	58.20	74	4.30	2.69	8.99	4.40	4.07	8.8	29.174
	October	68	5.72	14.58	46.01	76	3.05	c 1.91	9.77	4.33	4.31	10.1	29.070
	August	37	3.11	20.21	68.05	72	5.59	3.49	8.19	3.77	3.73	8.6	29.144
	July	36	3.03	20.68	70.95	71	5.95	3.72	7.96	3.15	3.04	7.3	29.166

* See foot-notes to Table 87, page 224.

b Exceptions to the proposition that the Average Daily Temperature was lower than the average in months when more than the average number of deaths from Pneumonia occurred, and vice versa.

c Exceptions to the proposition that less than the average amount of vapor was inhaled in months when more than the average number of deaths from Pneumonia occurred, and vice versa.

* Excluding 1 death in unknown month.

The relative prevalence, in 1888, of consumption, pneumonia, typhoid fever, scarlet fever, and diarrhea in each of the eleven geographical divisions of the State, may be seen in Table 96. The proportion of deaths from consumption in the northern division seems to have been unusually great in 1888, while in the Upper Peninsula it was less than usual. Pneumonia also shows a low rate per cent in the Upper Peninsula, and its highest rate per cent in the Western division. Typhoid fever seems to have had a very low rate per cent in the southeastern division, while Scarlet fever shows its highest rate in that division. The counties included in each division may be seen in Table 75.

TABLE 96.—*Exhibiting for the State and Eleven Geographical Divisions, in 1888, the Number and Per Cent of Deaths returned from all causes, from Consumption, Pneumonia, Typhoid Fever, Scarlet Fever and Diarrhea.*

State and Geographical Divisions.	Deaths from all causes, 1888.	Consumption.		Pneumonia.		Typhoid Fever.		Scarlet Fever.		Diarrhea.	
		Number of deaths.	Per cent to deaths from all causes.	Number of deaths.	Per cent to deaths from all causes.	Number of deaths.	Per cent to deaths from all causes.	Number of deaths.	Per cent to deaths from all causes.	Number of deaths.	Per cent to deaths from all causes.
State.....	21,764	2,424	11.14	1,190.	5.47	638	2.93	323	1.48	371	1.70
Upper Peninsular.....	1,753	115	6.56	65	3.71	87	4.96	30	1.71	56	3.19
Northwestern.....	610	51	8.36	40	6.56	14	2.30	1	.02	18	2.95
Northern.....	391	64	16.37	26	6.65	12	3.07	5	1.28	2	.51
Northeastern.....	368	30	8.15	21	5.71	7	1.90	2	.54	7	1.90
Western.....	2,165	259	11.96	156	7.21	72	3.33	11	.51	44	2.03
Northern Central.....	686	79	11.52	42	6.12	26	3.79	9	1.31	5	.73
Eastern.....	2,959	318	10.75	175	5.91	78	2.64	35	1.18	49	1.66
Central.....	2,347	276	11.76	130	5.54	110	4.69	28	1.19	19	.81
Southwestern.....	1,273	157	12.33	82	6.44	70	5.50	8	.63	13	1.02
Southern Central.....	2,885	361	12.51	169	5.86	70	2.43	25	.87	10	.35
Southeastern.....	6,327	714	11.28	234	4.49	92	1.45	169	2.67	148	2.34

There were 1,174 persons returned in 1888 as having died of "old age," the greater portion of whom were over 70 years of age. Of the decedents returned from this cause, 586 were males and 588 were females. By reference to Table 78 it will be observed that the months having the greatest number of deaths from this class were March and April, and those having the least were June, July and August.

As has been observed in previous reports, deaths from old age and those aged 70 and over occurred in the largest proportion in the older and longer settled portions of the State, while deaths from those aged under 5 had the greatest ratio in the newer portions of the State. Thus, the highest rate per cent of deaths from old age was in the Southern Central division, and the lowest in the Upper Peninsular and North eastern divisions. Deaths of those aged under 5 had the highest rate per cent in the Upper Peninsular and the lowest in the Southern Central.

TABLE 97.—*Exhibiting, for the State and Eleven Geographical Divisions, the Number and per cent of Deaths at all Ages, from Old Age, of all aged 70 and over, and of all aged under 5, during the Year 1888.*

State and Geographical Divisions.	Deaths at all ages,—1888.	Old Age.		Aged 70 and Over.		Aged under 5.	
		Number of deaths.	Per cent to deaths at all ages by geographical divisions.	Number of deaths.	Per cent to deaths at all ages by geographical divisions.	Number of deaths.	Per cent to deaths at all ages by geographical divisions.
State	21,764	1,174	5.39	2,878	13.22	8,480	38.96
Upper Peninsular	1,753	85	2.00	59	3.37	1,001	57.10
Northwestern	610	30	4.92	57	9.34	282	46.23
Northern	391	15	3.84	27	6.91	169	43.22
Northeastern	368	5	1.36	17	4.62	214	58.15
Western	2,165	109	5.03	264	12.19	881	40.69
Northern Central	686	25	3.64	56	8.16	285	41.55
Eastern	2,959	140	4.73	312	10.54	1,222	41.30
Central	2,347	129	5.50	425	18.11	624	26.59
Southwestern	1,273	86	6.76	263	20.66	350	27.49
Southern Central	2,885	243	8.42	750	26.00	610	21.14
Southeastern	6,327	357	5.64	648	10.24	2,842	44.92

In Table 98 are given the average ages of all who have died in the State for the years 1886, 1887, 1888, and the average for ten years, 1878-1887. As compared with the figures of 1887, there was a slight decrease in the average age, at death, of all the males, and a slight increase in the average age of the females. It may be seen that the average age of males for the year 1888 was nearly 29 years, and the average age of females nearly a year younger.

The average age of all over 20 years of age was 55 years for males and 52 years for females. Those who died from consumption show an average age of 37 years for males and 33 years for females. The average age of the native-born and also of the foreign-born persons who have died in this State during these years may be seen in the table. There is a great difference between the average age at death, of the native and foreign-born inhabitants, but when the comparison is made between those aged 20 years and over this disparity does not appear.

TABLE 98.—*Showing the Average Age of Decedents in Michigan during the Years 1886, 1887, 1888, and the Average for Ten Years, 1878-1887.*

	Year Ending,	Average Age in Years and 100ths of a Year.			
		Totals.	Males.	Females.	Excess of Males.
Deaths as shown by Registration Returns.....	Dec. 31, 1886.....	27.78	28.75	26.88	1.87
Deaths of Native-born Inhabitants as shown by Registration Returns.....		21.80	22.22	21.36	.86
Deaths of Foreign-born Inhabitants as shown by Registration Returns.....		49.25	50.81	48.47	1.84
Deaths from Consumption, by Registration Returns.....		36.37	39.41	34.04	5.37
All aged 20 and over whose occupations were stated in Registration Returns of Deaths.....		51.98	53.62	49.77	3.85
All who died aged 20 years and over as shown by Registration Returns.....		53.46	55.44	51.31	4.13
Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns.....		52.66	55.02	49.73	5.29
Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns.....		53.89	54.67	53.52	1.15
Deaths as shown by Registration Returns.....	Dec. 31, 1887.....	29.10	29.07	28.04	1.03
Deaths of Native-born Inhabitants as shown by Registration Returns.....		21.86	21.82	22.32	-.50
Deaths of Foreign-born Inhabitants as shown by Registration Returns.....		49.74	50.23	49.12	1.11
Deaths from Consumption, by Registration Returns.....		35.40	37.06	34.00	3.00
All aged 20 and over whose occupations were stated in Registration Returns of Deaths.....		51.88	53.70	49.48	4.22
All who died aged 20 years and over as shown by Registration Returns.....		53.72	55.17	52.03	3.14
Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns.....		52.52	55.22	50.82	4.40
Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns.....		54.27	54.21	54.38	-.17
Deaths as shown by Registration Returns.....	Dec. 31, 1888.....	28.52	28.80	28.12	.68
Deaths of Native-born Inhabitants as shown by Registration Returns.....		21.33	21.70	22.11	-.41
Deaths of Foreign-born Inhabitants as shown by Registration Returns.....		50.49	50.80	50.11	.69
Deaths from Consumption, by Registration Returns.....		35.55	37.73	33.79	3.94
All aged 20 and over whose occupations were stated in Registration Returns of Deaths.....		52.15	53.80	50.01	3.79
All who died aged 20 years and over as shown by Registration Returns.....		54.29	55.92	52.41	3.51
Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns.....		52.92	55.04	50.95	4.09
Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns.....		54.96	55.27	54.58	.69
Deaths as shown by Registration Returns.....	Average for 10 years, 1878-1887.....	26.61	27.16	26.08	1.08
Deaths of Native-born Inhabitants as shown by Registration Returns.....		20.66	20.75	20.80	-.05
Deaths of Foreign-born Inhabitants as shown by Registration Returns.....		48.46	49.09	47.18	1.91
Deaths from Consumption, by Registration Returns.....		35.91	38.50	33.69	4.81
All aged 20 and over whose occupations were stated in Registration Returns of Deaths.....		52.33	54.32	49.96	4.36
All who died aged 20 years and over as shown by Registration Returns.....		52.59	54.28	50.80	3.48
Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns.....		51.50	54.14	49.31	4.83
Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns.....		53.81	53.97	53.04	.93

LONGEVITY OF DECEDENTS.

In table 99 are presented the statistics concerning the occupations, as far as stated, of persons who died in Michigan during the nineteen years from 1870 to 1888. All who died under twenty years of age have been excluded from the table. No definite conclusion can be drawn from the age attained by any single individual, but when a sufficient number engaged in any one occupation can be taken collectively, they form a good basis for an average estimate of longevity or expectation of life.

The table is divided into twelve general classes, and under each class are included the various trades and professions to which each belongs. The highest average age by class is 59.41 years and the lowest 42.16. This shows a difference of over seventeen years between the average age, at death, of cultivators of the earth and seafaring men.

It is hoped that the facts here given will be put to some good use in throwing some light upon the comparative healthfulness of different pursuits. If the number and average age of the living among these various classes were known, it would add greatly to the value of these statistics.

In the following sub-divisions of the classes, those occupations are selected which have the highest and lowest average age. In these exhibits, care is taken to select such examples only as have cases enough to form some reasonable basis for estimates.

No.	Males.	Av. Age.	No.	Females.	Av. Age.
53	Retired Farmers.....	69.99	111	Weavers.....	68.35
98	Retired.....	72.78	33	Physicians.....	58.88
18	Weavers.....	73.11	88	Nurses.....	58.82
52	Spinners.....	71.44	28	Boarding House Keepers.....	56.29
17	Basket-makers.....	68.97	2,538	Farmers.....	55.58
365	Clergymen.....	64.81	145	Tailoresses.....	52.57
14	Surveyors.....	64.29	54	Merchants.....	52.48
90	Capitalists.....	63.94	12	Basket-makers.....	50.17

No.	Males.	Av. Age.	No.	Females.	Av. Age.
155	Brakemen.....	28.40	33	Students.....	21.65
96	Students.....	23.86	18	Farmers' Daughters.....	29.56
14	Rivermen.....	29.50	23	Prostitutes.....	26.41
64	Telegraphers.....	32.59	73	Clerks.....	30.00
58	Woodsmen.....	34.75	556	Teachers.....	30.06
153	Cigar-makers.....	35.35	343	Dress-makers.....	33.92
159	Printers.....	35.85	25	Musicians.....	34.78
713	Clerks.....	33.98	10	Hair Dressers.....	35.18
24	Upholsterers.....	38.71	17	Artists.....	37.79
14	Well Diggers.....	38.98	1,086	Domestics.....	38.17
1,162	Miners.....	38.05	166	Milliners.....	38.28
23	Finishers.....	34.50	23	Cooks.....	39.20
124	Farm Laborers.....	37.18	11	Agents.....	38.41

TABLE 99.—*Exhibiting by classified occupations, the number, aggregate, and average age of decedents in Michigan, aged 20 years and over for the 19 years, 1870-1888; one-half year added to age of each for months and years excluded.*

Class.	Occupations,—19 Years, 1870-1888.	Number of Persons.	Age in Years and Hundredths of a Year.	
			Aggregate.	Average.
	All Aged 20 Years and over.....	121,148	6,318,418.50	52.15
	All Specified Occupations—Aged 20 Years and Over.....	113,259	5,906,900.00	52.15
	Occupations Unspecified—Aged 20 Years and Over.....	7,889	411,518.50	52.16
I.	Cultivators of the Earth.....	30,850	1,832,874.50	59.41
II.	Active Mechanics Abroad.....	3,399	181,052.50	53.27
III.	Active Mechanics in Shops.....	4,339	221,603.00	51.07
IV.	Inactive Mechanics in Shops.....	2,061	107,937.50	52.39
V.	Laborers—No Special Trades.....	10,857	482,094.50	44.40
VI.	Agents, Laborers Abroad, etc.....	2,381	103,169.00	43.33
VII.	Seafaring Men.....	796	33,559.00	42.16
VIII.	Soldiers.....	58	2,961.00	51.05
IX.	Business Men.....	4,911	234,935.50	47.84
X.	Professional Men.....	2,106	107,448.00	51.02
XI.	Unemployed.....	6,048	334,667.00	55.34
XII.	Females.....	53,342	2,676,087.00	50.17
I.	Cultivators of the Earth.....	30,850	1,832,874.50	59.41
	Farmers.....	30,402	1,806,922.50	59.50
	Farm Laborers.....	124	4,610.00	37.18
	Fruit Growers.....	12	640.00	53.33
	Gardeners.....	248	14,440.00	58.23
	Nurserymen.....	11	552.50	50.23
	Retired Farmers.....	53	3,709.50	69.99
II.	Active Mechanics Abroad.....	3,399	181,052.50	53.27
	Brick-makers.....	87	2,011.50	54.36
	Carpenters and builders.....	2,462	130,149.00	52.86
	House-movers.....	9	510.50	56.72
	Masons.....	635	34,085.50	53.68
	Millwrights.....	108	6,510.50	63.21
	Pavers.....	1	21.50	21.50
	Ship-carpenters.....	65	3,401.50	52.33
	Stone cutters.....	87	4,362.50	50.14
III.	Active Mechanics in Shops.....	4,339	221,603.00	51.07
	Bakers.....	119	6,166.50	51.82

TABLE 99.—CONTINUED.—*Occupations of Decedents, etc.*

Class.	Occupations,—19 Years, 1870-1888.	Number of Persons ^f	Age in Years and Hundredths of a Year.	
			Aggregate.	Average.
III.	Active Mechanics in Shops.—(Continued.)			
	Blacksmiths.....	795	44,235.50	55.64
	Boiler-makers.....	68	1,599.00	42.08
	Book-binders.....	12	589.00	49.08
	Bottlers.....	4	114.00	28.50
	Brewers.....	111	5,268.50	56.47
	Broom-makers.....	12	589.00	48.58
	Cabinet-makers.....	181	9,522.50	52.61
	Carriage-makers.....	151	8,645.50	57.25
	Carriage-trimmers.....	15	668.50	44.57
	Chair-makers.....	2	100.00	50.00
	Confectioners.....	18	846.00	47.00
	Cooks.....	57	2,710.50	47.55
	Coopers.....	402	23,060.00	57.41
	Coppersmiths.....	10	595.00	59.50
	Dyers.....	17	888.50	49.82
	Finishers.....	23	792.50	34.50
	Foundrymen.....	14	709.00	50.64
	Gilders.....	8	260.00	32.50
	Glass-blowers.....	4	169.00	42.25
	Gunsmiths.....	58	3,095.50	58.41
	Machinists.....	285	14,135.50	49.80
	Marble-workers.....	33	1,497.50	45.38
	Mechanics.....	481	23,712.50	49.90
	Millers.....	297	16,469.50	55.45
	Model-makers.....	21	1,104.50	52.60
	Molders.....	189	7,474.50	39.55
	Painters.....	506	22,012.00	43.50
	Plasterers.....	21	1,135.50	58.98
	Plumbers.....	33	1,329.50	40.29
	Potters.....	6	418.00	69.67
	Rope-makers.....	5	291.50	58.80
	Sail-makers.....	4	195.00	48.75
	Saw-makers.....	5	235.50	47.10
	Sawyers.....	15	588.50	35.90
	Smelters.....	2	101.00	50.50
	Spinners.....	52	3,715.00	71.44
	Stove-mounters.....	20	748.00	37.40
	Tanners.....	87	1,995.50	58.98

TABLE 99.—CONTINUED.—*Occupations of Decedents, etc.*

Class.	Occupations,—19 Years, 1870-1888.	Number of Persons.	Age in Years and Hundredths of a Year.	
			Aggregate.	Average.
III.	Active Mechanics in Shops.—(Continued.)			
	Tinners.....	96	4,180.00	43.02
	Turners.....	81	1,490.50	43.08
	Unclassified.....	29	1,241.50	42.81
	Upholsterers.....	24	929.00	38.71
	Wagon-makers.....	78	4,325.50	59.25
	Weavers.....	18	1,316.00	73.11
	Wood-carvers.....	10	473.00	47.30
IV.	Inactive Mechanics in Shops.....	2,061	107,967.50	52.39
	Barbers.....	180	7,059.00	39.22
	Basket-makers.....	17	1,172.50	68.97
	Cigar-makers.....	153	5,408.50	35.35
	Furriers.....	2	114.00	57.00
	Harness-makers.....	170	8,140.00	47.88
	Hatters.....	20	1,099.00	54.95
	Jewelers.....	111	5,419.50	48.82
	Lithographers.....	6	160.00	26.67
	Printers.....	159	5,699.50	35.85
	Shoe-makers.....	788	47,682.00	60.51
	Silversmiths.....	7	396.50	56.64
	Tailors.....	448	25,617.00	57.18
V.	Laborers,—No Special Trades.....	10,857	482,094.50	44.40
	Choppers.....	8	285.00	35.63
	Ditchers.....	10	621.00	62.10
	Janitors.....	37	2,166.50	58.55
	Laborers.....	9,151	415,008.50	45.35
	Loggers.....	29	961.50	33.16
	Mill-hands.....	179	7,213.50	40.30
	Miners.....	1,162	44,214.00	38.05
	Miscellaneous.....	133	6,123.50	46.04
	Porters.....	20	831.00	41.55
	Rivermen.....	14	413.00	29.50
	Salt Packers.....	4	222.00	55.50
	Servants.....	38	1,482.00	39.00
	Well-diggers.....	14	545.00	38.93
	Woodsmen.....	58	2,013.00	34.71

VITAL STATISTICS OF MICHIGAN, 1888.

TABLE 99.—CONTINUED.—*Occupations of Decedents, etc.*

Class.	Occupations,—19 Years, 1870-1888.	Number of Persons.	Age in Years and Hundredths of a Year.	
			Aggregate.	Average.
VI.	Agents, Laborers Abroad, etc.....	2,381	103,169.00	43.33
	Agents.....	163	7,506.50	46.05
	Baggagemen.....	26	1,057.00	40.65
	Brakemen.....	155	4,401.50	28.40
	Butchers.....	281	13,155.50	46.82
	Collectors.....	9	412.50	45.88
	Commercial Travelers.....	59	2,444.50	41.43
	Conductors.....	69	2,648.50	38.39
	Constables.....	14	667.00	47.64
	Draymen.....	91	4,827.50	53.05
	Drovers.....	49	2,412.50	49.23
	Engineers.....	77	3,445.50	44.75
	Expressmen.....	7	343.50	49.07
	Firemen.....	17	643.50	37.85
	Hackmen.....	49	2,197.50	44.85
	Hostlers.....	15	668.50	44.57
	Hunters and Trappers.....	42	2,240.00	53.33
	Indian Chief.....	1	104.50	104.50
	Inspectors of Oil, Gas, Salt, etc.....	8	345.00	43.13
	Jockeys.....	5	191.50	38.30
	Mail Carriers.....	4	219.00	54.75
	Milk Peddlers.....	20	1,090.00	54.50
	Overseers and Superintendents.....	53	2,557.50	48.25
	Peddlers.....	169	8,650.50	51.19
	Policemen.....	32	1,296.00	40.50
	Railroad Engineers.....	325	13,284.50	40.88
	Railroad Expressmen.....	12	544.00	45.33
	Railroad Firemen.....	56	1,204.00	21.50
	Railroad Laborers.....	153	6,029.00	38.16
	Railroad Men.....	97	3,968.50	40.91
	Sextons.....	7	387.50	55.36
	Station Agents.....	8	286.00	35.75
	Switchmen.....	26	866.00	33.31
	Teamsters.....	231	10,686.50	46.26
	Toll-gate keepers.....	5	302.50	60.50
	Waiters.....	5	159.50	31.90
	Watchmen.....	27	1,350.50	50.00
	Whitewashers.....	9	575.50	63.94

DECEDENTS,—AVERAGE AGE BY OCCUPATIONS.

245

TABLE 99.—CONTINUED.—*Occupations of Decedents, etc.*

Class.	Occupations,—19 Years, 1870-1888.	Number of Persons.	Age in Years and Hundredths of a Year.	
			Aggregate.	Average.
VII.	Seafaring men.....	796	33,359.00	42.16
	Fishermen.....	142	6,597.00	46.46
	Officers.....	55	2,727.50	49.59
	Sailors.....	594	23,944.00	40.31
	United States Navy.....	5	290.50	58.10
VIII.	Soldiers.....	58	2,961.00	51.05
	Officers.....	7	376.50	53.79
	Soldiers.....	51	2,584.50	50.68
IX.	Business men.....	4,911	234,935.50	47.84
	Auctioneers.....	5	205.50	53.10
	Bankers.....	105	6,198.50	59.03
	Book-keepers.....	269	11,121.50	41.34
	Capitalists.....	90	5,755.00	63.94
	Clerks.....	713	24,189.50	33.93
	Commission Merchants.....	25	1,440.50	57.62
	Contractors and Jobbers.....	79	4,618.50	58.46
	Furniture Dealers.....	11	534.50	48.59
	Grain Buyers.....	19	968.50	50.97
	Grocers.....	226	10,963.50	48.51
	Hotel Clerks.....	7	258.50	36.93
	Hotel Keepers.....	317	16,656.50	52.54
	Insurance Agents.....	74	3,867.00	52.26
	Justices of the Peace.....	45	2,434.50	54.10
	Liquor Dealers.....	22	1,024.00	46.55
	Liverymen.....	74	3,328.00	45.11
	Lumbermen.....	498	22,948.50	46.55
	Manufacturers.....	192	10,063.00	52.41
	Merchants.....	1,282	66,702.00	52.03
	Mill Owners.....	9	505.50	56.17
	News Agents.....	11	438.50	39.86
	Public Officers.....	149	7,747.50	52.00
	Real Estate Dealers.....	86	5,269.00	61.27
	Restaurant Keepers.....	25	1,202.50	48.10
	Salesmen.....	80	3,516.00	43.95
	Saloon Keepers.....	442	19,374.00	43.83
	Undertakers.....	22	1,188.00	54.00
	All Others.....	39	2,357.50	60.45

TABLE 99.—CONTINUED.—*Occupations of Decedents, etc.*

Class.	Occupations,—19 Years, 1870-1888.	Number of Persons.	Age in Years and Hundredths of a Year.	
			Aggregate.	Average.
X.	Professional Men.....	2,106	107,448.00	51.02
	Actors.....	11	479.50	43.59
	Architects.....	13	603.50	46.42
	Artists.....	26	1,390.00	42.50
	Attorneys at Law.....	298	15,672.00	52.59
	Civil Engineers.....	40	2,320.00	58.00
	Clergymen.....	865	23,478.50	64.31
	Dentists.....	56	2,521.00	45.02
	Draughtsmen.....	2	180.00	90.00
	Druggists.....	144	6,385.00	44.34
	Editors.....	45	2,035.50	45.23
	Electricians.....	2	66.00	33.00
	Judges.....	4	222.00	55.50
	Lecturers.....	2	100.00	50.00
	Musicians.....	52	2,280.00	43.85
	Opticians.....	3	132.50	44.17
	Photographers.....	22	812.00	36.91
	Physicians and Surgeons.....	564	31,578.00	55.98
	Stenographers.....	1	22.50	22.50
	Students.....	96	2,291.00	23.86
	Surveyors.....	14	900.00	64.29
	Teachers.....	241	10,019.50	41.57
	Telegraphers.....	64	2,086.00	32.59
	Veterinary Surgeons.....	31	1,743.50	56.24
XI.	Unemployed.....	6,048	334,867.00	55.34
	Paupers.....	244	14,514.00	59.48
	Pensioners.....	8	569.00	71.13
	Retired.....	98	6,786.50	72.78
	Unemployed.....	1,960	117,155.00	59.77
	Unknown.....	3,724	194,904.00	52.34
	All others.....	19	738.50	38.87
XII.	Females.....	53,342	2,676,087.00	50.17
	Actresses.....	4	127.00	31.75
	Agents.....	11	422.50	38.41
	Artists.....	17	642.50	37.79
	At Home.....	368	11,040.50	30.00
	Basket-makers.....	12	602.00	50.17

DECEDENTS,—AVERAGE AGE BY OCCUPATIONS.

247

TABLE 99.—CONTINUED.—*Occupations of Decedents, etc.*

Class.	Occupations,—19 Years, 1870-1888.	Number of Persons.	Age in Years and Hundredths of a Year.	
			Aggregate.	Average.
XII.	Females.—(Continued.)			
	Boarding-house Keepers.....	28	1,576.00	56.29
	Book-keepers.....	7	251.50	35.93
	Cigar-makers.....	6	166.00	27.67
	Clerks.....	78	2,190.50	30.00
	Confectioners.....	6	259.00	43.17
	Cooks.....	28	901.50	39.20
	Domestics.....	1,086	39,548.00	36.17
	Dress-makers.....	343	11,633.50	33.92
	Druggists.....	3	154.50	51.50
	Factory Employés.....	7	193.50	27.64
	Farmers.....	2,588	140,933.00	55.53
	Farmers' Daughters.....	18	532.00	29.56
	Farmers' wives.....	531	28,979.50	54.58
	Hair-dressers.....	19	667.50	35.13
	Hotel-keepers.....	52	2,378.00	45.73
	Housekeepers.....	12,100	657,274.50	54.32
	Housewives.....	23,583	1,121,651.50	47.56
	Houseworkers.....	1,189	55,226.50	46.45
	Laborers.....	289	11,712.50	49.01
	Laundresses.....	10	418.00	41.80
	Manufacturers.....	9	470.50	52.28
	Matrons.....	91	4,795.50	52.70
	Merchants.....	54	2,834.00	52.48
	Millers.....	8	424.00	53.00
	Milliners.....	166	6,354.00	38.28
	Ministers.....	5	290.50	58.10
	Miscellaneous.....	152	7,071.00	46.52
	Musicians.....	25	869.50	34.78
	Nurses.....	88	5,132.00	58.32
	Paupers.....	101	5,836.50	57.79
	Physicians.....	33	1,926.50	58.38
	Prostitutes.....	23	607.50	26.41
	Saloon-keepers.....	10	461.00	46.10
	Seamstresses.....	251	10,098.50	40.23
	Spinsters.....	11	628.50	57.14
	Stenographers.....	2	50.00	25.00
	Students.....	33	714.50	21.65

TABLE 99.—CONTINUED.—*Occupations of Decedents, etc.*

Class.	Occupations,—19 Years, 1870-1888.	Number of Persons.	Age in Years and Hundredths of a Year.	
			Aggregate.	Average.
XII.	Females.—(Continued.)			
	Tailoresses.....	145	7,622.50	52.57
	Teachers.....	556	16,712.00	30.06
	Telegraphers.....	7	171.50	24.50
	Unemployed.....	4,994	285,380.50	57.13
	Unknown.....	4,165	216,614.50	52.01
	Washer-women.....	66	3,046.00	46.15
	Weavers.....	111	7,587.50	68.35
	Widows.....	13	957.50	73.65

LAWS OF MICHIGAN,
CONCERNING THE
REQUIRING OF A CIVIL LICENSE TO MARRY,

THE SOLEMNIZATION OF MARRIAGES, AND THE RECORD, RETURN,
AND COMPILATION OF BIRTHS, MARRIAGES, AND DEATHS;
WITH SUGGESTIONS TO PERSONS AUTHORIZED TO
SOLEMNIZE MARRIAGES.

CHAPTER 236, HOWELL'S ANNOTATED STATUTES, 1882.

MARRIAGE AND THE SOLEMNIZATION THEREOF.

SECTION.

6209. Who shall be capable of contracting Marriage.
6210. Marriage is a civil contract.
6211. Who shall not intermarry.
6212. 6213. 6214. Who not to marry.

SECTION.

6215. Marriage, by whom solemnized.
6217. No particular form required.
6220. Marriages not void in certain cases.
6221. Marriages among Quakers, etc.

Chapter eighty-three of Revised Statutes of 1846, with amendments. *

(6209.) SECTION 1. Every male who shall have attained the full age of eighteen years, and every female who shall have attained the full age of sixteen years, shall be capable in law of contracting marriage, if otherwise competent.

(6210.) SEC. 2. Marriage, as far as its validity in law is concerned, is a civil contract to which the consent of parties capable in law of contracting is essential.

(6211.) SEC. 3. No man shall marry his mother, grandmother, daughter, granddaughter, stepmother, grandfather's wife, son's wife, grandson's wife,

* For prior Statutes relative to the solemnization of marriages, see Woodward Code, p. 42; Cass Code, p. 111; Code of 1820, p. 259; Rev. of 1827, p. 290; Laws of 1832, p. 6; Rev. of 1838, p. 329; R. S. of 1838, p. 333.

wife's mother, wife's grandmother, wife's daughter, wife's granddaughter, nor his sister, brother's daughter, sister's daughter, father's sister, or mother's sister.

(6212.) SEC. 4. No woman shall marry her father, grandfather, son, grandson, stepfather, grandmother's husband, daughter's husband, granddaughter's husband, husband's father, husband's grandfather, husband's son, husband's grandson, nor her brother, brother's son, sister's son, father's brother, or mother's brother.

(6213.) SEC. 5. No marriage shall be contracted whilst either of the parties has a former wife or husband living, unless the marriage with such former wife or husband shall have been dissolved.^b

(6214.) SEC. 6. No insane person or idiot shall be capable of contracting marriage. All marriages heretofore contracted between white persons and those wholly or in part of African descent are hereby declared valid and effectual in law for all purposes, and the issue of such marriages shall be deemed and taken legitimate as to such issue and as to both of the parents.

(6215.) SEC. 7. Marriages may be solemnized by any justice of the peace in the county in which he was chosen, and they may be solemnized throughout the State by any minister of the gospel who has been ordained according to the usages of his denomination, and who is a pastor of any church or churches in this State, or who shall continue to preach the gospel in this State: (*Provided.*)*

(6216.) SEC. 8.*

(6217.) SEC. 9. In the solemnization of marriage, no particular form shall be required, except that the parties shall solemnly declare, in the presence of the magistrate or minister and the attending witnesses, that they take each other as husband and wife; and in every case there shall be at least two witnesses, besides the minister or magistrate, present at the ceremony.

SEC. 10.† SEC. 11.† SEC. 12.† SEC. 13.† SEC. 14.*

(6220.) SEC. 16. No marriage solemnized before any person professing to be a justice of the peace or a minister of the gospel, shall be deemed or adjudged to be void, nor shall the validity thereof be in any way affected on account of any want of jurisdiction or authority in such supposed justice or minister: *Provided*, The marriage be consummated with a full belief on the part of the persons so married, or either of them, that they have been lawfully joined in marriage.

(6221.) SEC. 17. The preceding provisions of this chapter, so far as they relate to the manner of solemnizing marriages, shall not affect marriages among the people called Friends or Quakers; nor marriages among people of any other particular denomination having, as such, any peculiar mode of solemnizing marriages; but such marriages may be solemnized in the manner heretofore used and practiced in their respective societies or denominations.

^b Act 137, Laws of 1887, prohibits divorced persons from re-marrying for a period specified in the decree, not to exceed two years.

*Repealed by Act 128, Laws of 1887.

†Repealed by Act 194, Laws of 1887, p. 266, Sec. 10.

ACT NO. 128, LAWS OF 1887.

FOR THE REQUIRING OF A CIVIL LICENSE IN ORDER TO MARRY,
AND THE DUE REGISTRATION OF THE SAME, AND TO PROVIDE A
PENALTY FOR THE VIOLATION OF THE PROVISIONS OF THE
SAME.*

SECTION 1. *The People of the State of Michigan enact, It* shall be necessary for all parties, intending to be married, to obtain a marriage license from the county clerk of the county in which either the man or woman resides, and to deliver the said license to the clergyman or magistrate who is to officiate, before the marriage can be performed.*

Persons intend-
ing marriage
must obtain
license from
county clerk.

SEC. 2. Blank forms for marriage license and certificate, as also proper books of registration ruled for the items contained in said forms shall be prepared by the Secretary of State, and shall be furnished by him to the county clerk of the various counties of the State in quantities needed. The blank forms for license and certificate shall be made in duplicate and shall provide spaces for the entry of the following items, to wit: The full name, age, color, place of residence, place of birth, occupation, and if known, the father's name, and mother's maiden name, of each of the parties to be married; the number of times either of the parties may have been previously married; the bride's maiden name, in case she is a widow; the date of the giving of the license; the signature of the county clerk; the date and place of the marriage; the names and residences of two witnesses to the marriage, and the certification of the officiating clergyman or magistrate, that the marriage contemplated by the license has been performed by him. And the Secretary of the State shall furnish to the county clerks of the various counties of the State, blank forms of affidavit, containing the requisite allegations, under the laws of this State, of the competency of the parties to unite in the bonds of matrimony, and any party applying for license to marry, shall cause such an affidavit to be made and filed with the county clerk, as a basis for the issuing of the license; and such affidavit, together with the license, shall be made a matter of record of said clerk's office.

Secretary of
State to furnish
forms, blanks,
etc.

Form of license.

Secretary of
State to furnish
to county clerks
blank forms of
affidavits, etc.

SEC. 3. It shall be the duty of the county clerk, on application being made to him, to fill out the blank spaces of the license according to the sworn answer of the applicant taken before him

Duty of county
clerk.

*This act went into effect Sept. 27, 1887.

*Amended by Act No. 256, Laws of 1889, which see on following page for amended provisions.

Fees.	<p>or some person duly authorized by law to administer oaths. If it shall appear that the parties are legally entitled to be married, the county clerk shall sign the license in certification of the fact that it is properly issued, and he shall make a correct copy thereof in the books of registration. For his services connected therewith he shall be entitled to a fee of fifty cents, to be paid by the party applying and at the time of the issuing of the license. He shall give the license, thus filled out and signed by him, together with the blank form of certificate, to the party applying for delivery to the clergyman or magistrate who is to officiate at the marriage. On the return of the license to the county clerk (as specified in section four, below), with the certificate of the clergyman, or magistrate, that the marriage has been performed, he shall record in the book of registration, in their proper places of entry, the date and place of the marriage, the names and residences of two witnesses to the marriage, and the name of the officiating clergyman or magistrate. All licenses and certificates so issued and returned shall be preserved on file in the office of the county clerk, and he shall, as often as once in three months, make a faithful report to the Secretary of State of all licenses and certificates issued and received by him.</p>
Licenses and certificates, where filed, etc.	
Duty of officiating clergyman or magistrate.	<p>SEC. 4. It shall be the duty of the clergyman or magistrate, officiating at a marriage, to fill out the spaces of the certificate left blank for the entry of the time and place of the marriage, the names and residences of two witnesses, and his own signature in certification that the marriage has been performed by him. He shall separate the duplicate license and certificate and retain one-half for his own record, and he shall return the other half within ten days to the county clerk issuing the same.</p>
Penalty for violating act by county clerk.	<p>SEC. 5. Any county clerk who shall refuse to give a license to persons properly applying and legally entitled to be married, or who shall violate any of the provisions of this act, shall be adjudged guilty of a misdemeanor, and shall be punished by a fine of not less than twenty-five dollars or more than one hundred dollars, or in default of payment thereof by imprisonment in the county jail for a term of thirty days.</p>
Penalty for violation, by clergyman, etc.	<p>SEC. 6. Any clergyman or magistrate who shall join together in marriage parties who have not delivered to him a properly issued license, as provided for in this act, or who shall violate any of the provisions of this act, shall be adjudged guilty of a misdemeanor, and shall be punished by a fine of one hundred dollars, or, in default of payment thereof, by imprisonment in the county jail for a term of ninety days.</p>
Penalty for neglect to return certificate.	<p>SEC. 7. Any person whose duty it shall be to return a marriage certificate to the county clerk, who shall neglect to return said certificate, shall be adjudged guilty of a misdemeanor, and shall be punished by a fine of not exceeding one hundred dollars or ninety days' imprisonment, or both in the discretion of the court.</p>
False swearing in application, perjury.	<p>SEC. 8. Any person applying for a marriage license who shall swear to a false statement therein, shall be guilty of perjury and shall be prosecuted therefor under the general laws of the State.</p>

SEC. 9. All reports of marriage, sent by the county clerks of the various counties of the State to the office of the Secretary of State, shall be preserved on file in that office, and a proper record thereof shall be made and kept. Filing and recording of reports.

SEC. 10. The record of any license to marry, or of any marriage certificate in any county clerk's office, or a certified copy thereof, shall be *prima facie* evidence in any court or proceedings in this State, with the same force and effect as if the original were produced, both as to the facts therein contained and as to the genuineness of the signatures thereto. Records of license, etc., prima facie evidence.

SEC. 11. All other acts and parts of acts which are inconsistent herewith are hereby repealed. Acts repealed.

ACT NO. 256 LAWS OF 1889.

AN ACT to amend section one of act number one hundred and twenty-eight, of the laws of eighteen hundred and eighty-seven, being an act entitled "An act for the requiring of a civil license in order to marry, and the due registration of the same, and to provide a penalty for the violation of the provisions of the same," and to extend the provisions of said act to non-residents of this State.

Section
amended.

SECTION 1. *The People of the State of Michigan enact*, That section one of act number one hundred and twenty-eight of the session laws of eighteen hundred and eighty-seven, being an act entitled "An act for the requiring of a civil license in order to marry, and the due registration of the same, and to provide a penalty for the violation of the provisions of the same," approved May, thirty-first, eighteen hundred and eighty-seven, be and the same is hereby amended so as to read as follows:

Persons intend-
ing marriage
must obtain
license.

SECTION 1. *The People of the State of Michigan enact*, It shall be necessary for all parties intending to be married to obtain a marriage license from the county clerk of the county in which either the man or woman resides, and to deliver the said license to the clergyman or magistrate who is to officiate, before the marriage can be performed. If both parties to be married are non-residents of the State it shall be necessary to obtain such license from the county clerk of the county in which the marriage is to be performed.

Where non-
residents must
obtain license.

This act is ordered to take immediate effect.

Approved July 3, 1889.

CHAP. 23, HOWELL'S ANNOTATED STATUTES, 1882.

AN ACT TO PROVIDE FOR THE REGISTRATION OF BIRTHS,
MARRIAGES AND DEATHS, BEING ACT NO. 194 OF 1867, AS
AMENDED BY ACT NO. 125 OF 1869.*

(858.) SECTION 1. *The People of the State of Michigan enact,* Duties of super-
That it shall be the duty of the supervisor of each township, visors and asses-
and the supervisor or assessor of any city or ward therein, in sors.
this State, between the tenth day of April and the first day of In 1869 returns
June, in the year eighteen hundred and sixty-nine, to ascer- to be made
tain, by actual inquiry or otherwise, of the inhabitants thereof, from April 5 to
the births and deaths which have occurred in their respective Dec. 31, 1868.
townships, cities, or wards, from and including April fifth, Return to county
eighteen hundred and sixty-eight, to and including December clerk.
thirty-first, eighteen hundred and sixty-eight, together with In 1870 and
the facts relative thereto, as are hereinafter provided for, and thereafter.
shall make an accurate return thereof to the clerk of the Returns to in-
county in which such township or city is situated, on or before clude from Jan-
the first said day of June; and for such service shall receive uary to Decem-
ten cents for each birth and death so returned by them, to be paid ber last preced-
by the county in which such returns are made. In the year ing.
eighteen hundred and seventy, and in each and every year Statistics, how
thereafter, it shall be the duty of the officers above mentioned, obtained.
between the tenth day of April and the first day of June, to Compensation.
ascertain, by actual inquiry or otherwise, of the inhabitants Proviso relative
thereof, the births and deaths which have occurred in their to the city of
respective townships, cities, or wards, during the year ending Detroit.
on the last day of the preceding December, and shall make the Duty of common
return, and receive therefor the compensation above provided council.
for: *Provided*, That in the city of Detroit, the duties required Persons to be
by this act to be performed by supervisors and assessors shall appointed by.
be performed by persons appointed by the common council, for Compensation
that purpose; and it shall be the duty of the common council of persons so
on or before the tenth day of April, in each year, to appoint appointed.
such number of persons in each ward of said city as shall be
necessary to perform said duties within the time limited by
this act; and such persons shall possess all the authority con-
ferred upon, and perform all the duties required of supervisors
and assessors, by this act, within the territory assigned them,
respectively by the common council, and shall receive such
compensation for their services, not exceeding the sum allowed
by this act to supervisors and assessors, as shall be fixed by

*See Act No. 128, Laws of 1887, printed herewith, for registration of marriages.

How paid.	the common council, to be paid by the county of Wayne,
Penalties.	and shall be liable to the same penalties for refusal or neglect to perform any of said duties.
Marriages to be recorded.	(859.) SEC. 2. Every justice of the peace, minister of the gospel, and all other persons authorized by law to solemnize marriages in this State, shall make a record of each marriage so solemnized by him, and every clerk or keeper of the records of the meetings in which any marriage among the Friends or Quakers shall be solemnized, shall make a record of such marriage, together with all the facts relating to the same, as required by the third section of this act; and such justice, minister of the gospel, clerk, or other person, shall, at the time such marriage is solemnized, deliver, on demand, to either of the parties so joined in marriage, as aforesaid, a certificate of such marriage, containing all the facts in relation thereto, required by said third section of this act, and shall, within ninety days thereafter, deliver to the clerk of the county in which such marriage took place, a certified copy of such record, and, at the same time, pay to the clerk twenty-five cents for recording the same.*
Marriage of Quakers.	
Certificates to be furnished.	
Fee for recording.	(860.) SEC. 3. It shall be the duty of the county clerks of the several counties in this State, on receiving the returns of such births, marriages, and deaths, to record the same at length in separate books, to be provided at the expense of the State by the Secretary of State, for that purpose, with proper indexes thereto. The births, marriages, and deaths shall be numbered and recorded in the order in which they are received by the clerk, and the record of marriages shall be indexed, using both the name of the bridegroom and bride. The record of births shall state, in separate columns, the date of the birth, the name of the child (if it have any), the sex and color of the child, the place of birth, the christain and surname of both parents, the residence and nativity of the parents, the occupation of the father, and the date when the record was made: <i>Provided</i> , That in case the child has no christian name, such name shall be obtained and reported to the county clerk in the next annual report of the supervisor or assessor, and such christian name shall be distinctly designated in such report as the christian name belonging to a child previously reported, and shall be properly entered by said county clerk, in the blank left for such christian name in his book of record; and it shall be the duty of the several county clerks, on or before the tenth day of April in each year, to give to the officers required to make the said returns, lists of such children whose christian names have not been previously reported in their respective towns, cities or wards. The record of marriages shall state, in separate columns, the date and place of marriage, the christian and surname of the bridegroom and bride, and the maiden name of the bride, if a widow, the color, age, and place of birth of each, the residence of each at the time of marriage, the occupation of the bridegroom, and the name and official station of the person by or before whom they were married, the names and residences of at least two witnesses present at such
County clerks; duties of.	
Births, marriages and deaths to be numbered and indexed. Record of births shall state.	
Proviso.	
Record of marriages shall state.	

*The provisions of this section are undoubtedly repealed by Act 128, Laws of 1887, except so far as relates to the delivering of a certificate to either of the parties joined in a marriage.

marriage, and the date when such record was made.* The record of deaths shall state, in separate columns, the date of the death, the christian and surname of the deceased, the sex and color, whether married or single, the age in years, months, and days, the place of death, the disease or apparent cause of death, the nativity of the deceased, and the occupation, if any, and the names, residence of the partents, if known, and the date when such record was made. The clerks of the several counties shall annually, on or before the first day of September make and transmit to the Secretary of State, a certified copy of the records of his office, of all the births, marriages,* and deaths reported in their respective counties for the year ending December thirty-first, last preceding. And each county clerk shall receive for the record of each birth and death in his office three cents, and three cents for each birth, marriage, and death, returned by him to the Secretary of State, to be paid by the county, and shall be compensation in full for all services required by this act to be performed by him.

Record of deaths shall state.

Return of county clerk.

Compensation.

(861.) SEC. 4. The Secretary of State shall prepare and furnish to the county clerks of the several counties in this State, blank books of suitable quality and size, with proper rulings and headings, to be used as books of record, in carrying into effect the provisions of this act. He shall also prepare and furnish blank "forms of returns," as hereinbefore specified accompanied with such instructions and explanations as may be necessary to insure uniformity in such returns, which blanks shall be forwarded to the several county clerks on or before the first day of March in each year; and the said county clerks shall deliver the same to the supervisors or assessors of the several townships, cities or wards therein, in their respective counties, on or before the tenth day of April.

Secretary of State shall furnish all blank books, blanks, instructions, etc.

(862.) SEC. 5. It shall be the duty of the Secretary of State to receive the returns made in pursuance of the third section of this act, and he shall cause the same for each year to be bound together, in one or more volumes, at the expense of the State, and make indexes thereto; and with such assistance as may be voluntarily rendered by any authorized committee appointed by the medical faculty of the university of Michigan or by any regularly authorized medical society in this State, for that purpose, he shall prepare such tabular statements, results, and deductions therefrom as will render them of practical utility, and make report thereof, annually, to the Governor of the State, which report may be ordered published and distributed in such manner as the Legislature may from time to time direct.

Returns to be bound and indexed.

Secretary of State to make annual report.

(863.) SEC. 6. Every justice of the peace, minister of the gospel, and all other persons authorized by the laws of this State to solemnize marriages, and clerks or keepers of records of the meetings in which any marriage among the Friends or Quakers shall be solemnized, who shall neglect or refuse to make a record of such marriage, or to deliver to the county clerk of the county in which the marriage took place, a

Neglect to keep records.

Neglect to deliver certificates.

*Amended by Act 128, Laws of 1887, which see on previous pages for amended provisions.

	certified copy of such record, or who shall refuse, on demand, to deliver to the parties to such marriage the certificate thereof, as required by section two of this act, or who shall willfully make a false or fictitious entry in his record of marriages or in the certified copy of such record delivered to the county clerk, or in the certificates of marriages delivered to the parties thereto, shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be punished by fine not exceeding one hundred dollars, and in default of paying the same, shall be imprisoned in the county jail of the county in which such conviction shall be had, until said fine be paid, but not to exceed the period of ninety days.*
Penalty.	
Certificate of death.	(864.) SEC. 7. Every physician, surgeon, or midwife, who shall have been in attendance upon any deceased person, shall, upon application of any supervisor or assessor of the township, city, or any ward thereof, in which such death occurred, make out and deliver to such supervisor or assessor a certified statement, without fee, containing the name of the disease, or cause (if known), producing the death of such person; and any
Refusal to make certificate.	medical attendant who shall neglect or refuse to give such statement, or who shall willfully make a false statement in relation to such death, shall, for such offense be liable to pay a
Penalty.	fine of not less than ten nor more than fifty dollars, and the costs of prosecution, which fine the said supervisor or assessor is hereby required to sue for and collect, in his official character.
Facts to be obtained by supervisor.	(865.) SEC. 8. It shall be the duty of each supervisor or assessor to obtain the facts in relation to births and deaths within his township, city, or any ward therein (not otherwise obtained), from the heads of families, the keepers, overseers, or superintendents of asylums, hospitals, jails, prisons, work-houses, almshouses, houses of correction, and similar institutions, the keepers of hotels, public and private boarding-houses, and the masters or chief officers of steamboats and sail vessels, navigating any of the waters of this State, and touching at any port of entry therein, in which such births or deaths occurred; and if either of the above named persons shall refuse to give such information, then the same shall be obtained by such supervisor or assessor from any person having a knowledge of the facts in relation to such birth or death; and if the supervisor or assessor shall have reason to believe that any person or persons willfully misrepresented or concealed any facts relative to such birth or death in his township, city, or any ward therein, which he cannot otherwise obtain, he may examine such person or persons on oath (which oath such supervisor or assessor is hereby empowered and authorized to administer) in relation to any birth or death within his township, city, or any ward therein, of which such person or persons may have any knowledge or information; and if any person, after being duly subpoenaed (as provided for compelling the attendance of witnesses in justices' courts) by such super-
Refusal to furnish.	
Obtained under oath.	
Neglecting to answer a subpoena.	

*The provisions of this section are undoubtedly repealed by Act 128, Laws of 1897, except so far as relates to the penalty for refusing to deliver to the parties to a marriage a certificate thereof.

visor or assessor, for the purpose aforesaid, shall neglect or refuse to appear before such officer, or, appearing, shall refuse to be sworn and testify in relation to such matter, he shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished therefore by fine not exceeding fifty dollars, Penalty. and in default of paying the same shall be imprisoned in the county jail of the county in which such conviction shall be had, until said fine be paid, but not exceeding ninety days; and any person who after being duly sworn as aforesaid, shall willfully Perjury. make any false statement in relation to any birth or death, about which he is required to testify, shall be deemed guilty of willful and corrupt perjury: *Provided*, That no person shall be Proviso. required to answer any question which will tend to criminate himself or herself upon any such examination.

(866.) SEC. 9. In case of the refusal or neglect by any of the Neglect to perform duties. officers mentioned in this act, to perform any of the duties hereinbefore required of them or either of them, to be done and performed by any of the provisions herein contained, such officer shall be liable to a fine not to exceed one hundred dollars, and Penalty. the costs of prosecution; and the prosecuting attorney in each county is hereby required to prosecute, in the name of the people of the State of Michigan, all persons in his county who shall willfully violate any of the provisions of this act; and the said Misdemeanor. supervisor or assessor of any township, city, or any ward therein, may be prosecuted for a misdemeanor under the section, and upon conviction, punished as therein provided for.

SUGGESTIONS TO PERSONS AUTHORIZED TO SOLEMNIZE MARRIAGES IN MICHIGAN.

A thorough knowledge of the law concerning the solemnization and return of marriages in Michigan is necessary to a correct performance of the duties of persons authorized to solemnize marriages.

The most frequent violation of the law is in the marriage of persons *under the lawful age*, which is: for males eighteen (18) years, and for females sixteen (16) years. See Section (6209), Howell's Annotated Statutes, 1882, printed on a previous page. The penalty for the violation of this provision is a forfeit of not exceeding one hundred (100) dollars. See Sec. 6, Act 128, Laws of 1887, printed on a previous page.

In the record and return of marriages, every item specified in the law should be carefully ascertained, and correctly and plainly written. No item should be omitted, and nothing taken for granted, as is often the case with the fact as to COLOR of persons married.

In recording the BIRTHPLACE of each, the State or country should be distinctly given in each case. This will avoid the difficulty of ascertaining the nativity of persons whose birthplace is returned "Holland," "Hanover," "Denmark," "Wales," "Paris," etc.,—names of places which may be either in the United States or Europe. If such or similar names occur, please state whether it is Holland, *Michigan*, or Holland, *Europe*, and so for each case. Never return the birthplace "America," as we cannot know whether it is in the United States, and are therefore compelled to compile it with the "Unknown."

Blanks for the return of marriages to the county clerk will not be required under the new law, as the return of the license with the certificate properly filled out will constitute the proper return to the county clerk.

The license to marry can only be procured from the several county clerks, but the affidavit necessary to procure the same may be made before any person authorized to administer oaths, and blank affidavits can be had from any county clerk or from the office of the Secretary of State.

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